

DOCUMENT RESUME

RD 163 375

CG 013 149

TITLE

Hearing Before the Subcommittee on Select Education
of the Committee on Education and Labor, House of
Representatives, Ninety-Fifth Congress, Second
Session on H.R.12146. Adolescent Pregnancy.

INSTITUTION

Congress of the U.S., Washington, D.C. House.

PUB DATE

24 Jul 78

NOTE

325p.; Not available in hard copy due to small
type

EDRS PRICE
DESCRIPTORS

MF \$0.83 Plus Postage. HC Not Available from EDRS.

Adolescents; *Community Programs; *Contraception;

*Federal Legislation; Females; Hearings;

*Illegitimate Births; *Pregnancy; *Unwed Mothers

IDENTIFIERS

*Congress 95th

ABSTRACT

A hearing before the Subcommittee on Select Education
of the House Committee on Education and Labor is transcribed. A
discussion is presented which centers on H.R.12146, whose purposes
are: (1) to establish a program for developing networks of
community-based services to prevent initial and repeat pregnancies
among adolescents; (2) to provide care to pregnant adolescents; and
(3) to help adolescents become productive independent contributors to
family and community life. The text of the bill is reproduced,
followed by testimony from a variety of experts in the area, and a
section of prepared statements, letters and other supplementary
material. (BP)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

ADOLESCENT PREGNANCY

HEARING

BEFORE THE

SUBCOMMITTEE ON SELECT EDUCATION

OF THE

COMMITTEE ON EDUCATION AND LABOR

HOUSE OF REPRESENTATIVES

NINETY-FIFTH CONGRESS

SECOND SESSION

ON

H.R. 12146

TO ESTABLISH A PROGRAM FOR DEVELOPING NETWORKS OF
COMMUNITY-BASED SERVICES TO PREVENT INITIAL AND
REPEAT PREGNANCIES AMONG ADOLESCENTS, TO PROVIDE
CARE TO PREGNANT ADOLESCENTS, AND TO HELP ADOLES-
CENTS BECOME PRODUCTIVE-INDEPENDENT CONTRIBUTORS
TO FAMILY AND COMMUNITY LIFE

HEARING HELD IN WASHINGTON, D.C., JULY 24, 1978

Printed for the use of the Committee on Education and Labor

CARL D. PERKINS, *Chairman*

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION



THIS DOCUMENT HAS BEEN REPRO-
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIGIN-
ATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRE-
SENT OFFICIAL NATIONAL INSTITUTE OF
EDUCATION POSITION OR POLICY

U.S. GOVERNMENT PRINTING OFFICE

WASHINGTON : 1978

31-736 0

COMMITTEE ON EDUCATION AND LABOR

©CARL D. PERKINS, Kentucky, *Chairman*

FRANK THOMPSON, Jr., New Jersey
JOHN H. DENT, Pennsylvania
JOHN BRADEMÁS, Indiana
AUGUSTUS P. HAWKINS, California
WILLIAM D. FORD, Michigan
PHILLIP BURTON, California
JOSEPH M. GAYDOS, Pennsylvania
WILLIAM "BILL" CLAY, Missouri
MARIO BIAGGI, New York
IKE ANDREWS, North Carolina
MICHAEL T. BLOUIN, Iowa
ROBERT J. CORNELL, Wisconsin
PAUL SIMON, Illinois
EDWARD P. BEARD, Rhode Island
LEO C. ZEFERETTI, New York
GEORGE MILLER, California
RONALD M. MOTTI, Ohio
MICHAEL O. MYERS, Pennsylvania
AUSTIN J. MURPHY, Pennsylvania
JOSEPH A. LE FANTE, New Jersey
TED WEISS, New York
CEC HEFTTEL, Hawaii
BALTASAR CORRADA, Puerto Rico
DALE E. KILDEE, Michigan

ALBERT H. QUIE, Minnesota
JOHN M. ASHERBROOK, Ohio
JOHN N. ERLÉNBOHN, Illinois
RONALD A. SARASIN, Connecticut
JOHN BUCHANAN, Alabama
JAMES M. JEFFORDS, Vermont
LARRY PRESSLER, South Dakota
WILLIAM F. GOODLING, Pennsylvania
BUD SHUSTER, Pennsylvania
SHIRLEY N. PETTIS, California
CARL D. PURSELL, Michigan
MICKEY EDWARDS, Oklahoma

SUBCOMMITTEE ON SELECT EDUCATION

JOHN BRADEMÁS, Indiana, *Chairman*

EDWARD P. BEARD, Rhode Island
GEORGE MILLER, California
DALE KILDEE, Michigan
CEC HEFTTEL, Hawaii
AUGUSTUS P. HAWKINS, California
MARIO BIAGGI, New York
CARL D. PERKINS, Kentucky, *Ex Officio*

JAMES M. JEFFORDS, Vermont
LARRY PRESSLER, South Dakota
ALBERT H. QUIE, Minnesota, *Ex Officio*

(11)

CONTENTS

Hearing held in Washington, D.C., July 24, 1978	Page 1
Text of H.R. 12146	2
Statement of—	
Baldwin, Wendy H., social demographer, Center for Population Research, National Institute of Child Health and Human Development, National Institutes of Health	28
Calsbeek, Ronald C., director, Park School, Grand Rapids Public Schools, Grand Rapids, Mich.	88
Forbush, Janet Bell, executive director, National Alliance Concerned With School-Age Parents	87
Hardy, Janet B., professor of pediatrics, the Johns Hopkins University, Baltimore, Md.	39
Jekel, James F., associate professor of public health, Yale University	33
Mecklenburg, Marjory, president, American Citizens Concerned for Life	105
Mooney, Chris, director, Center for Life, Providence Hospital, Washington, D.C.	56
Mulhauser, Karen, executive director, National Abortion Rights Action League	117
Palmer, Emily, executive director, Lulu Belle Stewart Center, Detroit, Mich.	51
Richmond, Julius, Assistant Secretary for Health, accompanied by Peter Schuck, Deputy Assistant Secretary for Planning and Evaluation, and Lulu Mae Nix, Project Director, Adolescent Pregnancy Initiative, Department of Health, Education, and Welfare	15
Sanchez, Rodolfo B., national executive director, the National Coalition of Hispanic Mental Health and Human Services Organizations, COSSMHO	128
Shipp, Denese A., prenatal director, adolescent pregnancy program, the Johns Hopkins Hospital, Baltimore, Md.	67
Prepared statements, letters, supplemental materials, et cetera—	
Baldwin, Wendy H., Ph. D., social demographer, Behavioral Sciences Branch, Center for Population Research, National Institute of Child Health and Human Development, Department of Health, Education, and Welfare, statement by	25
Calsbeek, Ronald C., director of Park School, Grand Rapids Public Schools, Grand Rapids, Mich., statement by	75
Forbush, Janet Bell, executive director, National Alliance Concerned With School-Age Parents, testimony of, with statement	88
Hardy, Janet B., M.D., professor of pediatrics, the Johns Hopkins University, testimony of	40
Mecklenburg, Marjory, president, American Citizens Concerned for Life, statement by	108
Mooney, Chris, director, Center for Life, Providence Hospital, testimony of	57
Mulhauser, Karen, executive director, National Abortion Rights Action League, testimony of	121
Sanchez, Rodolfo B., national executive director, the National Coalition of Hispanic Mental Health and Human Services Organizations, COSSMHO, statement by	131
Shipp, Denese A., prenatal director, adolescent pregnancy program, the Johns Hopkins Hospital, Baltimore, Md., testimony of	70

APPENDIX

	Page
"A Comparison of the Health of Index and Subsequent Babies Born to School Age Mothers," article entitled, from the American Journal of Public Health, April 1975	241
"An analysis of statistical methods for comparing obstetric outcomes. Infant health in three samples of school-age pregnancies," from American Journal of Obstetrics and Gynecology, January 1, 1972	265
Califano, Hon. Joseph A., Jr., Secretary, Department of Health, Education, and Welfare, letter to Chairman Brademas, enclosing answers to questions, dated August 29, 1978	298
"Factors Associated With Rapid Subsequent Pregnancies Among School-Age Mothers," report entitled, from American Journal of Public Health, September 1973	246
Fleegler, Dorothy, member, National Advisory Council on the Education of Disadvantaged Children, prepared statement of	290
"Induced Abortion and Sterilization Among Women Who Became Mothers as Adolescents," article entitled, from the American Journal of Public Health, July 1977	236
Population Bulletin, "Adolescent Pregnancy and Childbearing—Growing Concerns for Americans," publication entitled, May 1977, revised reprint	192
"Pregnancy and Special Education. Who Stays in School?" article entitled, from American Journal of Public Health, December 1972	251
"Primary or Secondary Prevention of Adolescent Pregnancies?" article entitled, from the Journal of School Health, October 1977	231
"Reflections" article entitled, from Advisory and Learning, January-February 1978	173
Sanchez, Rodolfo B., national executive director, the National Coalition of Hispanic Mental Health and Human Services Organizations, COSSMHO, letter to Chairman Brademas, dated July 26, 1978	149
Scheuer, Hon. James H., a Representative in Congress from the State of New York, "Preventing Teenage Pregnancies," article entitled	289
Shorey, Clyde E., Jr., vice president for public affairs, the National Foundation—March of Dimes, statement by	151
Smith, Lana D., director, Parent Focus. Associates for Renewal in Education, Inc., testimony on behalf of	162
"Subsequent Pregnancies Among Teenage Mothers Enrolled in a Special Program," article entitled, from American Journal of Public Health, December 1972	259
"Suicide Attempts in a Population Pregnant as Teen-agers," article entitled, from American Journal of Public Health, December 1970	276
Zero Population Growth. ZPG. Washington, D.C., comments submitted by, with attachments	178

ADOLESCENT PREGNANCY

MONDAY, JULY 24, 1978

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON SELECT EDUCATION,
COMMITTEE ON EDUCATION AND LABOR,
Washington, D.C.

The subcommittee met, pursuant to notice, at 10 a.m., in room 2175, Rayburn House Office Building, Hon. John Brademas (chairman of the subcommittee) presiding.

Members present: Representatives Brademas, Miller, and Kildee.
Staff present: Jack Duncan, counsel; Thomas Birch, deputy counsel; Martin LaVoor, senior legislative associate; Meredith Larson, minority professional staff member; Belita Heron, staff assistant; and Moya Benoit, secretary.

Mr. BRADEMAs. The Subcommittee on Select Education will come to order for the purpose of hearing testimony on H.R. 12146, the Adolescent Health, Services, and Pregnancy Prevention and Care Act of 1978.

[The text of H.R. 12146 follows:]

(1)

H. R. 12146

IN THE HOUSE OF REPRESENTATIVES

APRIL 17, 1978

Mr. BRADEMAN (for himself and Mr. ROGERS) (by request) introduced the following bill; which was referred jointly to the Committees on Education and Labor and Interstate and Foreign Commerce

A BILL

To establish a program for developing networks of community-based services to prevent initial and repeat pregnancies among adolescents, to provide care to pregnant adolescents, and to help adolescents become productive independent contributors to family and community life.

- 1 *Be it enacted by the Senate and House of Representa-*
- 2 *tives of the United States of America in Congress assembled,*
- 3 *That this Act may be cited as the "Adolescent Health,*
- 4 *Services, and Pregnancy Prevention and Care Act of 1978".*

FINDINGS AND PURPOSES:

6 •SEC. 2. (a) The Congress finds that—

- 7 (1) adolescents are at a high risk of unwanted
- 8 pregnancy;

(2) in 1975, almost one million adolescents became pregnant and nearly six hundred thousand carried their babies to term;

(3) pregnancy and childbirth among adolescents, particularly young adolescents, often results in severe adverse health, social, and economic consequences, including a higher percentage of pregnancy and childbirth complications; a higher incidence of low birth weight babies; a higher frequency of developmental disabilities; higher infant mortality and morbidity; a decreased likelihood of completing schooling; a greater likelihood that adolescent marriage will end in divorce; and higher risks of unemployment and welfare dependency;

(4) an adolescent who becomes pregnant once is likely to experience rapid repeat pregnancies and childbearing, with increased risks;

(5) the problems of adolescent pregnancy and parenthood are multiple and complex and are best approached through a variety of integrated and essential services;

(6) such services, including a wide array of educational and supportive services, often are not available to the adolescents who need them, or are available but

1 fragmented and thus of limited effectiveness in prevent-
 2 ing pregnancies and future welfare dependency; and

3 (7) Federal policy therefore should encourage the
 4 development of appropriate health, educational, and
 5 social services where they are now lacking or inade-
 6 quate, and the better coordination of existing services
 7 where they are available, in order to prevent unwanted
 8 early and repeat pregnancies and to help adolescents
 9 become productive independent contributors to family
 10 and community life.

11 (b) It is, therefore, the purpose of this Act—

12 (1) to establish better linkages among existing pro-
 13 grams in order to expand and improve the availability
 14 of, and access to, needed comprehensive community
 15 services which assist in preventing unwanted initial and
 16 repeat pregnancies among adolescents, enable pregnant
 17 adolescents to obtain proper care, and assist pregnant
 18 adolescents and adolescent parents to become produc-
 19 tive independent contributors to family and community
 20 life;

21 (2) to expand the availability of community serv-
 22 ices that are essential to that objective; and

23 (3) to promote innovative, comprehensive, and
 24 integrated approaches to the delivery of such services.

TITLE I—GRANT PROGRAM

AUTHORITY TO MAKE GRANTS

SEC. 101. The Secretary of Health, Education, and Welfare (hereinafter in this Act referred to as "the Secretary") may make grants to public and nonprofit private agencies and organizations to support projects which he determines will help communities coordinate, and establish linkages among, services that will further the purposes of this Act and, where appropriate, will provide, supplement, or improve the quality of such services.

USES OF GRANTS

SEC. 102. (a) Funds provided under this Act may be used by grantees to—

(1) link services to—

(A) prevent unwanted initial and repeat pregnancies among adolescents; and

(B) assist adolescents who are pregnant or who have already had their babies to obtain proper care, prevent unwanted repeat pregnancies, and become productive and independent contributors to family and community life;

(2) identify and provide access to other services for adolescents to help prevent unwanted pregnancy and assist adolescents in becoming productive and independent contributors to family and community life;

1 (3) supplement services and care not adequate in
2 the community which are essential to the prevention of
3 adolescent pregnancy and to assist adolescents in becoming
4 productive and independent contributors to family
5 and community life;

6 (4) plan for the administration and coordination of
7 pregnancy prevention and pregnancy-related services for
8 adolescents which will further the objectives of the Act;

9 (5) provide technical assistance to enable other
10 communities to develop successful pregnancy prevention
11 and pregnancy-related programs for adolescents; and

12 (6) provide training (but not including institu-
13 tional training, or training and assistance provided by
14 consultants) to providers of services, including skills in
15 multidisciplinary approaches to pregnancy prevention
16 and pregnancy-related services for adolescents and in
17 the provision of such services.

18 (b) For purposes of this Act, projects which link serv-
19 ices means projects which enable the provision of a com-
20 prehensive set of services in a single setting or establish
21 a well-coordinated network of services in a community, in-
22 cluding outreach to adolescents, the making available of
23 services in a convenient manner and in easily accessible
24 locations, and followup to assure that the adolescent is re-
25 ceiving appropriate assistance. The services which may be

1 included in such projects include, but are not limited to
 2 family planning services, education at the community level
 3 concerning sexuality and the responsibilities of parenthood,
 4 health, mental health, nutrition, education, vocational, and
 5 employment counseling, prenatal and postpartum health care,
 6 residential care for pregnant adolescents, and services to
 7 enable pregnant adolescents to remain in school or to con-
 8 tinue their education.

9 (c) Grantees may not establish income eligibility re-
 10 quirements for services paid for with funds under this Act,
 11 but grantees shall insure that priority is given to the objec-
 12 tive of making such services available to adolescents at
 13 risk of initial or repeat pregnancies who are not able to
 14 obtain needed assistance through other means.

15 (d) Grantees may charge fees for services paid for
 16 with funds under this Act, but only pursuant to a fee sched-
 17 ule, approved by the Secretary as a part of the application
 18 described in section 104, which bases fees charged by the
 19 grantee on the income of the service recipients or parents
 20 and takes account of the difficulty adolescents face in obtain-
 21 ing resources to pay for services.

22 (e) Except as provided in this subsection, in no case
 23 may a grantee under this Act use in excess of 50 per centum
 24 of its grant under this Act in any year to cover any part of

1 the cost of services. The Secretary may grant a waiver of
2 the limitation specified in the preceding sentence in accord-
3 ance with criteria to be specified in regulations.

4 PRIORITIES, AMOUNTS, AND DURATION OF GRANTS

5 SEC. 103. (a) In approving applications for grants
6 under this Act, the Secretary shall give priority to applicants
7 who—

8 (1) serve an area where there is a high incidence of
9 adolescent pregnancy;

10 (2) serve an area where the incidence of low in-
11 come families is high and where the availability of preg-
12 nancy related services is low;

13 (3) show evidence of having the ability to bring
14 together a wide range of needed services in comprehen-
15 sive single-site projects, or to establish a well integrated
16 network of outreach to, and services for, adolescents at
17 risk of initial or repeat pregnancies;

18 (4) will utilize, as a base, existing programs and
19 facilities, such as neighborhood and primary health care
20 centers, children and youth centers, maternal and infant
21 health centers, school educational programs, mental
22 health programs, nutrition programs, recreation pro-
23 grams, and other ongoing pregnancy prevention and
24 pregnancy-related services;

(5) make use, to the maximum extent feasible, of other Federal, State, and local funds, programs, contributions, and other third party reimbursements;

(6) can demonstrate a community commitment to the program by making available to the project non-Federal funds, personnel, and facilities; and

(7) have involved the community to be served, including public and private agencies, adolescents and families, in the planning and implementation of the project.

(b) The amount of a grant under this Act shall be determined by the Secretary, based on factors such as the incidence of adolescent pregnancy in the geographic area to be served, and the adequacy of pregnancy prevention and pregnancy-related services in the area to be served.

(c) (1) A grantee may not receive funds under this Act for a period in excess of five years.

(2) The grant may cover not to exceed 70 per centum of the costs of a project assisted under this Act for the first and second years of the project. Subject to paragraph (3), in each year succeeding the second year of the project the amount of the Federal grant under this Act shall decrease by no less than 10 per centum of the amount of the Federal grant under this Act in the preceding year.

(3) The Secretary may waive the limitation specified in

1 the preceding paragraph in any year in accordance with cri-
 2 teria to be specified in regulations.

3 REQUIREMENTS FOR GRANT APPROVAL

4 SEC. 104. (a) An application for a grant under this Act
 5 shall be in such form and contain such information as the
 6 Secretary may require, but must include—

7 (1) an identification of the incidence of adolescent
 8 pregnancy and related problems;

9 (2) a description of the economic conditions and
 10 income levels in the geographic area to be served;

11 (3) a description of existing pregnancy prevention
 12 and pregnancy-related services, including where, how,
 13 by whom and to whom they are provided, and the ex-
 14 tent to which they are coordinated in the geographic
 15 area to be served;

16 (4) a description of the major unmet needs for
 17 services for adolescents at risk of initial or repeat preg-
 18 nancies, the number of adolescents currently served in
 19 the area, and the number of adolescents not being served
 20 in the area;

21 (5) a description of certain core services to be in-
 22 cluded in the project or provided by the grantee, to
 23 whom they will be provided, how they will be linked,
 24 and their source of funding, to include some, but not
 25 necessarily all, of the following;

1 (A) family planning services;

2 (B) health and mental counseling;

3 (C) vocational counseling;

4 (D) educational services, which supplement
5 regular school programs, to help prevent adolescent
6 pregnancy and to assist pregnant adolescents and
7 adolescent parents to remain in school or to continue
8 their education;

9 (E) primary and preventive health services in-
10 cluding pre- and post-natal care; and

11 (F) nutritional services, and nutritional infor-
12 mation and counseling;

13 (6) a description of how adolescents needing serv-
14 ices other than those provided directly by the grantee
15 will be identified and how access and appropriate re-
16 ferral to those services (such as, medicaid; public as-
17 sistance; employment services; infant, day and drop-in
18 care services for adolescent parents; and other city,
19 county and State programs related to adolescent preg-
20 nancy) will be provided;

21 (7) a description of any fee schedule to be used
22 for any services provided directly by the grantee and
23 the method by which it was derived;

24 (8) a description of the grantee's capacity to

1 sustain funding as Federal funds are phased down and
2 out;

3 (9) a description of all the services and activities to
4 be funded, the results expected from the provision of
5 such services and activities; and a description of the
6 procedures to be used for evaluating those results;

7 (10) a summary of the views of public agencies,
8 providers of services, and the general public in the
9 geographic area to be served, of the proposed use of
10 the grant provided under this Act and a description of
11 procedures used to obtain those views, and, in the case

12 of applicants who propose to coordinate services admin-
13 istered by a State, the written comments of the appro-
14 priate State officials responsible for such services; and

15 (11) a description of how the services and activ-
16 ities funded with a grant under this Act would be co-
17 ordinated with existing related programs in the geo-
18 graphic area to be served by the grantee.

19 (b) Each grantee which participates in the program
20 established by this title shall make such reports concerning
21 its use of Federal funds as the Secretary may require.
22 Reports shall include the impact the project has had on
23 reducing the rate of first and repeat pregnancies among

1 adolescents, and the effect on factors usually associated
2 with welfare dependency.

3 AUTHORIZATION OF APPROPRIATIONS

4 SEC. 105. For the purpose of carrying out this title,
5 there are authorized to be appropriated \$60 million for the
6 fiscal year 1979, and such sums as may be necessary for the
7 fiscal year 1980 and the fiscal year 1981.

8 TITLE II--IMPROVING COORDINATION OF 9 FEDERAL AND STATE PROGRAMS

10 SEC. 201. (a) The Secretary shall coordinate Federal
11 policies and programs providing services related to preven-
12 tion of initial and repeat adolescent pregnancies. Among
13 other things, the Secretary shall--

14 (1) require that grantees under title I report peri-
15 odically on Federal programs or policies that interfere
16 with the delivery and coordination of pregnancy pre-
17 vention and pregnancy-related services to adolescents;

18 (2) provide technical assistance to assure that co-
19 ordination by grantees of Federal programs at the local
20 level will be facilitated;

21 (3) modify program administration, or recom-
22 mend legislative modifications of programs of the De-
23 partment of Health, Education, and Welfare that pro-
24 vide pregnancy-related services in order to facilitate
25 their use as a base for delivery of more comprehensive

1 pregnancy prevention and pregnancy-related services to
2 adolescents;

3 (4) give funding priority, where appropriate, to
4 grantees using single or coordinated grant applications
5 for multiple programs; and

6 (5) give priority, where appropriate, to providing
7 funding under existing Federal programs to projects
8 providing comprehensive pregnancy prevention and
9 pregnancy-related services.

10 (b) A State using funds provided under title I to im-
11 prove the delivery of pregnancy prevention and pregnancy-
12 related services throughout the State shall coordinate its
13 activities with programs of local grantees, if any, that are
14 funded under title I.

15 (c) The Secretary may set aside, in each fiscal year,
16 not to exceed 1 per centum of the funds appropriated under
17 this Act for evaluation of activities under titles I and II.

Mr. BRADEMAs. This legislation has been introduced in the House, of Representatives, with a companion measure in the Senate, as a comprehensive approach to address the problems of adolescent pregnancy.

An estimated 1 million teenagers become pregnant in the United States annually. In 1975, over 80 percent of these young women were unmarried, and over 600,000 teenaged girls had live births.

The health problems, the social responsibilities and, the educational difficulties confronting young mothers—and young fathers, too—are complex.

The Adolescent Health, Services, and Pregnancy Prevention and Care Act proposes to assist in preventing initial and repeat adolescent pregnancies and to assure pregnant teenagers adequate health care and support services which will enable them to remain in school and to become responsible, caring parents. H.R. 12146 would add new Federal funds to existing programs assisting prevention and care services for pregnant teenagers. It would also seek to coordinate existing services already provided by State, Federal, and private agencies.

At our hearing this morning, we will hear testimony on the nature and extent of the problems of adolescent pregnancy and the services these teenagers need to help them become productive, independent contributors to their communities.

Our witnesses today include representatives of the Department of Health, Education, and Welfare, researchers in the field of adolescent pregnancy, individuals working in community comprehensive service programs for pregnant teenagers, and representatives of organizations concerned with the welfare of pregnant adolescents and teenaged parents.

I am pleased to welcome, as our first witness, Dr. Julius Richmond, Assistant Secretary for Health in the Department of Health, Education, and Welfare, accompanied by Peter Schuck, Deputy Assistant Secretary for Planning and Evaluation, and Lulu Mae Nix, Project Director for HEW's Adolescent Pregnancy Initiative.

Dr. Richmond, we are very pleased to see you, and we look forward to hearing from you.

STATEMENT OF JULIUS RICHMOND, ASSISTANT SECRETARY FOR HEALTH, ACCOMPANIED BY PETER SCHUCK, DEPUTY ASSISTANT SECRETARY FOR PLANNING AND EVALUATION, AND LULU MAE NIX, PROJECT DIRECTOR, ADOLESCENT PREGNANCY INITIATIVE, DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

Dr. RICHMOND. Thank you very much, Mr. Chairman. It is a real pleasure to have this opportunity to appear before you and members of the subcommittee to testify in support of the Adolescent Health, Services, and Pregnancy Prevention and Care Act of 1978. Accompanying me today are Dr. Lulu Mae Nix, Project Manager for the Adolescent Pregnancy Initiative, and Peter Schuck, Deputy Assistant Secretary for Planning and Evaluation.

Appearing before you in my current role for the first time, I cannot help but comment on the contributions you have made to another program I was very much involved in a little more than a decade ago, the Head Start program, and the very considerable

insight you brought to the legislation in relationship to that program and to its development which, as you know, continues to the present time.

Mr. BRADEMAs. Thank you very much.

Dr. RICHMOND. I cannot help but also comment on the great contributions you made to the thinking of people throughout the Nation in relationship to comprehensive child care and child development through your introduction of the comprehensive child development bill.

I cannot speculate as to what might have happened if that bill had not been vetoed by the then President, so the country is in debt for the effort you have extended.

Mr. BRADEMAs. Thank you very much.

Dr. RICHMOND. Teenage pregnancy—the entry into parenthood of individuals who are often barely beyond childhood themselves—is one of the most serious and complex social problems facing our Nation today.

For most of us, the birth of a child is an occasion of great joy and hope, an investment in the future, a consecration of life. But for hundreds of thousands of teenagers—particularly the majority who are unmarried—the birth of a child can usher in a dismal future of unemployment, poverty, dropping out of school, family breakdown, emotional stress, dependency on public agencies, and health problems for mother and child.

Consider just a few of the consequences likely to befall a teenage mother and her child: Half of pregnant teenagers aged 15-17 receive no prenatal health care until the second trimester; 6 percent of pregnant teenagers under age 15 receive no prenatal care at all.

A baby born to a teenage mother is considerably more likely to die during the first year of life than a baby born to an older woman.

The likelihood of low-birth-weight babies is 30 to 50 percent greater for teenagers. And low birth weight is associated with a number of conditions, such as mental retardation which can cause lifelong health and disability problems.

Eight of ten women who become mothers by age 17 never complete high school.

A girl who marries at ages 14 to 17 is two to three times more likely to experience divorce or separation than one who marries in her early 20's.

The annual earnings of a woman who has her first child at age 15 or below are roughly 30 percent less than the earnings of a woman who has her first child at 19 or 20.

Of all children born out of wedlock, almost 60 percent end up on welfare.

These are sobering statistics. Behind them lie many personal tragedies and heavy social costs. Clearly, these human costs require national attention and national concern. Consider the dimensions of the teenage pregnancy problem in the United States: In 1976, 11 million teenagers aged 15-19 had experienced premarital sexual intercourse at least once. For teenage girls aged 15-19, the number was 4.2 million—40 percent of all girls 15-19—up from 30 percent in 1971. Two out of three boys in that age category had experienced

premarital sexual intercourse—and approximately 375,000 girls under age 15.

Despite the fact that contraceptive use among teenagers is widespread, increasing, and often effective, 25 percent of sexually active teenagers never use contraception. These adolescents who never use contraception are responsible for almost 60 percent of the premarital pregnancies among teenagers. In addition, 42 percent of those who do use contraceptives do not use them regularly.

We estimate that about 1 million adolescent girls—1 in 10, aged 15-19—become pregnant each year, the majority out of wedlock. Of these 1 million girls, 400,000 are 17 or under; 30,000 are 14 or under. Of this group, approximately 12,000 births take place. By anyone's standards, youngsters of 15 are not able psychologically to deal with parenthood. While some teenagers are married and wish to become pregnant, a substantial number of teenage pregnancies are unwanted; more than 300,000 teenage abortions were reported in 1976 to the Center for Disease Control.

Of these 1 million girls, 600,000 have their babies. Even though more than 235,000 of these babies are born out of wedlock, 9 out of 10 unmarried mothers decide to keep their babies.

Finally, many teenagers who give birth get pregnant again quickly. Of all teenagers who give birth, fully 25 percent become pregnant again within a year, in spite of widely available contraceptives. A far higher percentage become pregnant again within 2 years of their first child's birth.

We have data that comprehensive services lower the teenage pregnancy rate.

We must recognize that teenage pregnancies are often linked with other, pervasive social problems—poverty, unemployment, poor education, and family breakdown.

All this means that there are limits to what government can accomplish. Nevertheless, I believe that a concerned and compassionate government should do what it can to reduce the social costs and the toll of human suffering caused by premature sexual activity and unwanted pregnancy among teenagers.

This legislation constitutes an acceptance of that responsibility. The bill reflects what we believe is a consensus among knowledgeable people who know the problems associated with teenage pregnancy. Our bill also draws upon legislative proposals that have been previously advanced.

It is important to stress at the outset that the administration's total initiative on teenage pregnancy is much broader than this bill. We have proposed as part of the 1979 budget an expansion and targeting on teenagers of a number of existing programs, such as family planning, medicaid, maternal and child health, community health centers, education, and HEW funded research. In fiscal 1979, we have requested a total of \$344 million for programs to address the pressing problems of teenage pregnancy, an increase of \$148 million over current efforts.

The basic elements of this legislation can be briefly summarized: It authorizes the Department of Health, Education, and Welfare to make project grants for up to 5 years to groups committed to two purposes, preventing unintended teenage pregnancies and helping those teenagers who become pregnant. Grantees may be State and

local agencies, community health centers, family planning clinics, schools, churches, teenage centers, residential care facilities, community groups, and many other such groups.

In order to qualify for a grant, local projects will have to document the magnitude of the teenage pregnancy problem in their communities, describe the resources already available to address it, discuss the way in which they will link and improve these resources, and provide a plan for evaluating the effectiveness of their efforts.

The legislation requires Federal and State programs relating to adolescent pregnancy to be better coordinated at both levels and requires the Department of Health, Education, and Welfare to evaluate activities under the act.

The program is based upon four core principles: First, it pursues a pair of closely related goals, the prevention of unintended adolescent pregnancies and the care of pregnant teenagers and their babies.

Prevention is our first and most basic line of defense against unintended adolescent pregnancies. The Department's preventive strategy takes several forms, including education on the responsibilities of sexuality and parenting, family planning services, and large increases in research directed at prevention.

We anticipate that a significant portion of the \$60 million budgeted for our proposed program will go to projects providing such family planning and educational services. In addition, we have budgeted for substantial increases in fiscal 1979 in family planning for teenagers in the title X, community health centers, and maternal and child health programs, as well as expanding Medicaid coverage (including family planning) for approximately 280,000 teenage women.

But when, despite our efforts at prevention, these young women do become pregnant and decide to give birth, our concerns must shift: We must insure that both mother and child are healthy and that the new family can strive toward a self-sufficient and productive future. And we must attempt to prevent the unwanted second and third pregnancies which often quickly follow the first.

Achieving these objectives will require a variety of services: Prenatal care, parenting and other education, helping the young women go back to school, job counseling and training, as well as primary prevention services. By combining both approaches, this legislation, we believe, gives us a more effective strategy.

The second purpose of this act is to encourage expanded and comprehensive services for adolescents who are at risk of initial and repeat pregnancies, or in need of pregnancy-related care.

We would like to underscore the word comprehensive. Almost all people with experience in dealing with the problem agree that for many adolescents, only comprehensive services will succeed in achieving the objectives I have just discussed.

Many adolescents who will not seek family planning help on their own can be attracted by other services, such as health care, counseling, or legal services. Those who have long experience with comprehensive teenage programs tell us that quite a few teenagers who receive contraceptive information and counseling originally came seeking other services, such as vocational or legal counseling.

social services, or recreation. In particular, such comprehensive services can attract teenage boys into prevention and care programs, an important part of any solution, ultimately.

Comprehensive services are also important for pregnant adolescents and school-age parents. Health care, nutrition services, vocational and educational counseling, education in parenting and day care (which would allow the young mother to go back to school) are necessary for the adolescent family.

For example, the Mount Sinai Hospital family planning and teen services program in Chicago provides family planning, counseling, and sex education to adolescents.

The staff works within neighborhood schools to provide a 20-hour, 6-week sex education course. Rap sessions on health and sexuality, and a separate teen clinic, are provided at the local YMCA. An 8-week sex education training program is held for professionals and paraprofessionals who work in youth-related programs. Parents are invited to attend.

The New Futures School in Albuquerque, which provides educational, health, and social services to young women and their families, has reduced the 1-year repeat pregnancy rate to only 8 percent. Nearly one-third of the participants were school dropouts prior to their pregnancy, but more than 70 percent of mothers in the program return to school after the birth of their child. The program itself is located in a former public school and stresses the importance of continuing school.

The work done by other programs, such as the Brookside Family Life Center in Boston and the four centers of the Delaware Adolescent Program—that were conducted under the auspices of Dr. Nix—suggest that a comprehensive approach, including education, day care, medical care, and social services, can yield the most successful results.

Third, this legislation encourages local experimentation with a variety of innovative approaches to designing, delivering, and coordinating pregnancy prevention and care in ways suited to local needs.

Clearly, there is no single answer to the adolescent pregnancy problem. We are convinced that successful approaches will be devised in local communities, not in Washington. For this reason, the bill provides flexibility to fund different types of grantees with different approaches, different emphases, and different mixes of services. This diversity will ensure that the program is not locked into a single type of service delivery system, and it can be tailored to the needs of particular communities.

This flexibility, however, must be accompanied by a clearly defined set of priorities and by requirements that grantees document their need for support and their capacity to reduce the incidence of unwanted adolescent pregnancy. The bill lists seven criteria which will be considered in ranking and selecting grantees; it also prescribes the requirements for grant applications. Funding decisions will be made by the Public Health Service, in conjunction with the Office of Education and the Office for Human Development Services. Communities which meet these funding criteria will be provided appropriate training and technical assistance.

Fourth, this legislation builds, to the maximum possible extent, upon existing resources and institutions at the Federal, State, and local levels.

The \$60 million authorized by this legislation will not go very far unless it is used to call forth additional funds from other programs and sources, Federal, State, and local. The bill specifically requires this. Where pregnancy prevention and care programs already exist in a community, the bill will primarily encourage links between them and strengthen those links where needed. When a community lacks essential services, however, program funds may be used to provide them. The bill specifically provides for a gradual decline in Federal support for particular projects. The purpose of this provision is to stimulate the local support which alone can insure success. We will, however, be flexible about this requirement and permit adjustments in appropriate cases.

Let me turn now to two questions that have been raised about this legislation.

First, why new legislation? Can these purposes not be achieved under existing programs?

Our considered judgment, Mr. Chairman, is that the purposes I have outlined cannot be achieved very well—if at all—under existing programs.

Moreover, while existing agencies—title X projects, community health centers, maternal and child health clinics—would be eligible for grants under this law, we want to give local communities the freedom to choose other kinds of providers, for example, schools, church groups, or community organizations, as well as to be able to pull together the necessary services.

A second question concerns the projected cost of services for each client. This cost, of course, will depend critically on the mix of services provided. In existing programs, the range is great—from approximately \$400 for primary prevention projects involving family planning services, counseling, and education, up to \$1,600 for an array of services for pregnant teenagers, their babies and families. However, for five centers we surveyed which offer a reasonable range of support services to pregnant adolescents, average cost is approximately \$750 per client. And I want to stress that in many cases the client receiving these services will not be an individual but a family: a mother, her child, and even the child's father. In addition, services such as prenatal health care, delivery, postpartum and infant day care would, in many cases, be paid for by medicaid, maternal and child health, title XX, and other existing programs. And regular academic instruction would continue to be the responsibility of local school systems.

As you indicated in your introductory remarks, Mr. Chairman, adolescent pregnancy is one of the most complex, persistent, and poignant problems facing our society today. The power which government possesses to deal with it, I must emphasize, is limited. Nonetheless, we believe that this administration legislation—the Adolescent Health, Services, and Pregnancy Prevention and Care Act of 1978, together with the Department's expansion and retargeting of existing programs—represents an important start toward effective solutions. The cost of the program, we think, is entirely

justifiable—especially when measured against the far greater and harsher costs of simply maintaining our current efforts.

The role of government must necessarily be limited when we approach a problem that deals with private lives and behavior. But when the social costs and consequences of a problem are so great, we must not fail to take what steps we can. This legislation represents our effort—a carefully constructed and long-considered effort—to take those steps.

We are gratified by the support that this initiative has already attracted among Members of the Congress, and we intend to work closely with this committee and others in the coming months to insure passage of this legislation.

Thank you very much, Mr. Chairman. My colleagues and I would be glad to respond to any questions or comments.

Mr. BRADENAS. Thank you very much, Dr. Richmond. Let me put two or three questions to you.

One of these questions does not run particularly to the substance of this proposal, but is of concern to me as chairman of this subcommittee. As you are aware, this subcommittee has wide jurisdictional responsibility over many programs, one of which is the rehabilitation program. The House has overwhelmingly passed the bill expanding and extending the Rehabilitation Act of 1973. I think there were a dozen votes or so against it in the House. Yet I note by way of leak to the usually reliable Washington wire of the Wall Street Journal that the administration is considering a veto of the rehabilitation bill despite the widespread bipartisan support for it.

How do you justify coming in for legislation which would authorize a new program while on the other hand threatening to veto a measure which has such very broad support and that would extend an existing, much needed program?

Dr. RICHMOND. Well, I share your concerns, Mr. Chairman, concerning rehabilitation programs, having long been interested in these. I must confess I am not aware of the details concerning the administration's proposed action or potential action, regarding the legislation you support. But I would be glad to look into this and report back to you.

Mr. BRADENAS. I appreciate that very much. I only raise that warning flag because we have already found here on this subcommittee that we have had difficulty in winning support in the House for new programs in the human services field.

Let me turn to a couple of other questions which run directly to the bill under consideration this morning.

I note that you lay great stress in your testimony on the need for a comprehensive approach to the problem of teenage pregnancy, and yet we are talking here about \$60 million.

How many teenage young women would this proposed initiative reach?

Dr. RICHMOND. Mr. Chairman, as I indicated in my testimony, we anticipate there will be a considerable range in the needs of any one community. Some communities already have a variety of services which are ongoing. This legislation would not need to provide funds for those efforts which are already under way. So in some communities, we anticipate an expenditure of little more than \$100

per teenager might provide the type of coordination, integration of services which are ongoing whereas communities with less developed services might require more.

We have made projections that approximately 117,000 or 120,000 teenagers, additional teenagers might be served through those programs.

Mr. BRADEMAs. By teenagers, are you now talking about adolescent pregnant women?

Dr. RICHMOND. Not necessarily, because primary prevention would also be included.

Mr. BRADEMAs. Is there a minimum level of services which must be offered in the kind of comprehensive program which you say you believe to be necessary to address this problem effectively?

Dr. RICHMOND. We hope this legislation would indeed stimulate communities which do not have reasonably comprehensive services to develop them. We would look with favor on those communities which have developed some of the basic social services and education programs, who are utilizing the existing health programs and entitlements and the appropriate welfare entitlements. Where we find communities which do not have some of these services which are basic for the development of a comprehensive program, we do have in the legislation technical assistance provisions to try to help those communities exercise the entitlements on behalf of adolescent young people.

Mr. BRADEMAs. Given the observation—with which I doubt you would quarrel—that in many communities these services are either wholly inadequate or nonexistent, and given the magnitude of the problem, which you have outlined in your testimony, and given the extraordinarily uneven pattern of the sufficiency of such services in communities all across the country, I question the adequacy of the proposed program, particularly the funds that you would expend in coming to grips with a substantial portion of the problem.

Dr. RICHMOND. We do hope the programs which this legislation would authorize would serve as a stimulus to those communities which do not yet have comprehensive programs.

On the other hand, we do think it is important to provide to those communities that are coming close to doing a comprehensive job this additional support to make the programs comprehensive, because the data we are receiving now in the evaluation of programs indicates those which are truly comprehensive, for example, are significantly more effective in reducing the numbers of repeat pregnancies.

I would refer to the program in Rochester, N.Y., under the direction of Dr. Elizabeth McNerny. She has brought together educational, social services, and health programs and the program has showed a much better yield. We do not want to discriminate against those communities doing a reasonably good job, but not a full job, on behalf of those communities which have very few resources. We want to do both, as I indicated earlier. For those very poor in resources we would help, with the technical assistance in the legislation, we could assist them in making much better use of their entitlements.

The technical assistance we think can be an extremely valuable tool, because most communities do not know how to avail themselves of entitlements in health programs, social service programs, and educational programs which could potentially be available to them. We hope we can facilitate them making better use of those resources.

Mr. BRADEMAs. Thank you.

Mr. Miller.

Mr. MILLER. No questions.

Mr. BRADEMAs. Mr. Kildee.

Mr. KILDEE. Thank you very much. I have no further questions, Mr. Chairman.

Mr. BRADEMAs. You may find we may have other questions we would like to put to you which we can do in writing. We are very grateful to you.

Dr. RICHMOND. We think you have selected a very good group of witnesses.

Mr. BRADEMAs. Next we will hear from Wendy Baldwin and James F. Jekel. As you can observe, we have a very large number of witnesses, and I wonder, therefore, Ms. Baldwin and Professor Jekel, if we might ask you to summarize your statements and put them in their entirety in the transcript to give us a chance to ask you some questions.

**STATEMENT OF WENDY BALDWIN, SOCIAL DEMOGRAPHER,
CENTER FOR POPULATION RESEARCH, NATIONAL INSTITUTE
OF CHILD HEALTH AND HUMAN DEVELOPMENT, NATIONAL
INSTITUTES OF HEALTH**

Dr. BALDWIN. Thank you, Mr. Chairman.

I am Dr. Wendy Baldwin of the Center for Population Research, National Institute of Child Health and Human Development, National Institutes of Health.

When we look at adolescent reproduction in 1978, it is useful to do a brief resume as to how we got to the situation we are at now.

In the past 15 years, the birth rate has fallen, but it is important to look within those gross numbers in terms of numbers of births and rates if we are to understand the situation.

In terms of the birth rate, the reductions we have seen have been predominantly between women 18 and 19; much less for those between 15 and 17; and those 14 to 15 are at some of the highest levels.

When we look at the number of births, we see that even though there have been slight reductions in the overall number of births from 1960-76, we see an increase in the number of births to adolescents under the age of 18.

If we look at girls under the age of 15, we go from 7,400 births to almost 12,000 births. So we have an increasing concentration among the youngest population.

Similarly, if we look at legitimacy status, women over 20, the number of out-of-wedlock births has declined. However, this illegitimacy rate has increased for adolescents. We now find we have a little over 50 percent of the out-of-wedlock births are to teenagers. We have gone from 92,000 in 1960 to 235,000 in the younger adolescent.

If we look to the future, we see that the largest single birth cohort is now age 19. This means in succeeding years we will have fewer adolescents. It is possible to presume from that, therefore, that our problem will be diminishing in some respects. I do not think this is an appropriate conclusion. We look at the period 1976-80, we will expect about a 7-percent decrease in the population of adolescents 14 to 17. However, it is important to look at the proportion of adolescents who are sexually active. Here there are substantial increases.

Survey data from 1971-76 shows a 30-percent increase in the proportion of adolescent unmarried women sexually active. We have substantial increases in the proportion sexually active, which means we will be faced with an increase of those needing service and at risk with an unattended birth.

I would like to summarize some things we may think of in the future in terms of this problem. The younger the girls, the less the decline, so the rates are still relatively high. Even with declining rates there will continue to be large numbers of births. We have to look at the absolute number and not just the rates. The trend has been for an increasing number of these births to be out of wedlock, which will require government-sponsored services. Again, the number of legal abortions has continued to increase. Adolescents still account for one-third of legal abortions. In 1976, there were 637,000 abortions to women under the age of 20. Over 15,000 of these were to girls under the age of 15. In fact, a girl under the age of 15 had a greater likelihood of resolving the pregnancy through an abortion rather than live birth.

One final reason for concerns about the adolescent fertility rate, for most adolescents, pregnancies are unplanned and for many unintended.

A recent study shows of the girls who are unmarried at the time only 23 percent intended to become pregnant. A New York City study of new mothers showed a large number of girls 15 to 19 said they would have preferred to have the baby later or not at all.

In a followup study a couple of years later, fully 70 percent had said they wish they had had the baby later. We have ample testimony from the adolescents themselves in which they realize the timing of the birth was less appropriate.

I would like to submit my written testimony and not go any further into the statistics at this time.

Mr. BRADEMAS. Thank you very much.

[The prepared statement of Wendy Baldwin follows.]

TO BE RELEASED UPON DELIVERY ONLY.



DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
NATIONAL INSTITUTES OF HEALTH
BETHESDA, MARYLAND 20814

STATEMENT BY

WENDY R. BALDWIN, PH.D.

SOCIAL DEMOGRAPHER

BEHAVIORAL SCIENCES BRANCH

CENTER FOR POPULATION RESEARCH

NATIONAL INSTITUTE OF CHILD HEALTH AND HUMAN DEVELOPMENT

ON

ADOLESCENT CHILDBEARING IN THE UNITED STATES - 1976

BEFORE THE

SUBCOMMITTEE SELECT EDUCATION

JULY 24, 1978

I have been asked to testify on adolescent reproductive behavior in the U.S. today. There are several reasons for interest in this topic at this time. In order to understand the present it is necessary to review the pattern of reproduction among teenagers in the past. Also, in giving an overview I shall try to give sufficient detail to make the material meaningful. Sometimes it is necessary to look at grouped statistics for 15-19-year-olds, or all women under 20, in order to see the overall picture of adolescent fertility or because the data are not available in greater detail. In most cases, however, finer gradations should be used. The experiences of 15-year-olds are so different from those of 19-year-olds that to combine them is often unwarranted and may obscure the trends we hope to study.

Birth Rates

For example, the fertility rate--the number of births per 1000 women--for women aged 15-19 was 53.5 in 1976, the result of a steady decline since 1957, and now approaches the rate observed in the 1930s. While the trend in the fertility rate for adolescents is essentially the same for adults, there is considerable variation within the age group 15-19. In 1976 fertility rates ranged from 18.6 for 15-year-olds to 88.7 for 19-year-olds. When we look at the trends in the birth rate by single year of age we see that the older the teenager, the more her reproductive behavior resembles that of older women. Thus, women age 18 and 19 have fertility rates that rose after World War II, peaked in the late fifties, and are now near the lows experienced in the thirties. Younger adolescents present a different picture. The fertility rate for 16- and 17-year-olds rose to a peak in the late fifties and then

declined, although the rates now are still higher than pre-war rates. Rates for 14- and 15-year-olds also reached a peak in the late fifties and then declined, but in the seventies their rates have returned to the previous peak and in the case of 14-year-olds, have exceeded it. The birth rate for 14-year-olds is very low--6.8 per 1000 14-year-olds in 1976--but it has shown the greatest rise in the past decade. The last few years have seen slight declines in the birth rates for women under 16 as seen in Table 1.

To summarize, with the exception of the very young adolescents, the fertility rates for teenagers have generally followed the pattern found among older women. While the fertility rates for young adolescents have risen, the rates for older teens have fallen substantially. While the declines are substantial, they have been less than those experienced by older women.

Number of Births

The number of births to an age group is a function of their birth rate and the number of women in the specified age group. Today's teenagers are the product of the post-WWII baby boom and consequently there is an increased population base of women aged 15-19. While the birth rate to teenagers fell by 45% from 97.3 in 1957 to 53.5 in 1976 the number of births to women under 20 moved down only 6% from 609,000 to 571,000 in the same period.

The continued high numbers of births to adolescents, coupled with the larger declines in the birth rate for older women, means that births to teenagers are making up an increasing proportion of all births. In 1960, 14% of births were to women under the age of 20 whereas in 1976 the figure was 18%.

As with the fertility rate it is important to look at the distribution of births by single year of age. Younger adolescents (under 15 are responsible for an ever larger number of births--11,928 in 1976 as opposed to only 7400 in 1960. In 1976 there was an additional 215,493 births to women 15-17, an increase from 177,000 in 1960.

Marital Status of the Mother

Since marital status of the mother influences the extent to which a child and its mother will receive social support, it is useful to look at the illegitimacy rate and the number of out-of-wedlock births to adolescents (see Table 2). Whereas older women have generally reduced their illegitimacy rates (number of out-of-wedlock births per 1000 unmarried women) this is not the case for adolescents. Their illegitimacy rates are close to the highest ever observed in this country and the percent of out-of-wedlock births that occur to teenagers has generally increased over the years, currently standing at over 50 percent.

In 1976 there were 235,300 out-of-wedlock births to women under age 20--10,300 to women under age 15 and 116,500 to women 15-17. This is a considerable increase over 1961, when women under 15 had 5200 out-of-wedlock births and women 15-17 had 45,000 out-of-wedlock births.

A Look to the Future

The number of births is, of course, a function of the number of young women and their fertility rate. As we look to the future we see that the U.S. has had an abundance of teenagers as a result of the post World War II baby

TABLE 1

Births per 1,000 Women 14-19 Years of Age, by Single Years of Age, for All Women: United States, 1920-1975 (highest rates underlined.)

Period	14	15	16	17	18	19
1920-24	3.6	11.9	28.6	57.9	93.1	125.4
1925-29	3.9	12.3	28.5	55.6	86.9	114.0
1930-34	3.4	10.9	25.2	48.6	75.3	99.0
1935-39	3.7	11.5	26.0	49.0	75.0	97.9
1940-44	4.0	12.7	27.8	52.2	81.7	109.2
1945-49	4.9	15.5	34.1	63.7	99.4	133.0
1950-54	5.9	19.3	43.1	79.2	123.1	162.6
1955-59	6.0	20.1	<u>45.7</u>	<u>85.8</u>	<u>136.2</u>	<u>184.0</u>
1960-64	5.4	17.8	40.2	75.8	122.7	169.2
1965-69	5.7	16.5	36.0	66.4	105.4	142.4
1970-74	5.3	16.4	35.5	64.8	101.8	136.1
1975	5.3	16.5	35.3	63.2	97.5	129.5
1976	5.7	16.7	35.2	62.6	95.7	125.3
1977	6.0	17.4	35.8	63.1	95.7	124.3
1978	6.6	19.2	38.8	66.6	98.3	126.0
1979	6.7	19.2	38.5	64.2	95.8	116.1
1980	7.1	20.1	38.3	63.5	87.1	105.0
1981	7.4	20.2	38.8	64.5	83.1	98.5
1982	7.2	19.7	37.7	59.7	80.5	96.2
1983	7.1	19.4	36.4	57.3	77.5	92.7
1984	6.8	18.6	34.6	54.2	73.3	88.7

Percent decline from highest rate to 1975

8%

8%

37%

46%

Sources: 1920-73: National Center for Health Statistics, Fertility Tables for Birth Cohorts by Color: United States, 1917-73 DHEW Publication (OS) (HRA) 76-1152, U.S. Government Printing Office, 1976, p. 3.

1974-1976: National Center for Health Statistics, Unpublished tabulations.

boom. The largest birth cohort was age 19 in 1976 and since succeeding birth cohorts were smaller, there will be fewer adolescents in coming years. Between 1976 and 1980 we can expect the number of 14-27 year olds to decrease by 6.7%. If the proportion of those who are sexually active continues to increase, however, the net effect may well be an increase in the absolute number of adolescents at risk of pregnancy.

TABLE 2
Out of Wedlock childbearing - 1960, 1970 & 1976

	1960	1970	1976
Total number of births	4,257,850	3,731,386	3,167,788
Total number out-of-wedlock births	224,300	398,700	468,000
Number out-of-wedlock births to women under 20	91,700	199,900	235,300
Percent out-of-wedlock births to women under 20	40.9	50.1	50.2
Number out-of-wedlock births ages 18-19	43,400	94,300	108,500
Number out-of-wedlock births ages 15-17	43,700	96,100	116,500
Number out-of-wedlock births under 15	4,600	9,500	10,300
Illegitimacy rate, women 15-19	15.3	22.4	24.0
Illegitimacy rate, women 20-24	39.7	38.4	32.2

Sources: National Center for Health Statistics, Monthly Vital Statistics Report, "Final Natality Statistics, 1970," Vol. 22 No. 12 Supplement, March 20, 1974;
National Center for Health Statistics, Monthly Vital Statistics Report, "Final Natality Statistics, 1976," Vol. 26 No. 12 Supplement March 29, 1978
National Center for Health Statistics, Vital & Health Statistics, "Trends in Illegitimacy - United States 1940-1965", Series 21 No. 15, October 1968.

Dr. John Kantner and Dr. Melvin Zelnik of Johns Hopkins University note an increase from 1971 to 1976 in the percent of unmarried women 15-19 who have experienced coitus, as seen in Table 3. The increases are substantial, and while the number of young adolescents will decline slightly in the coming years it is possible that the number of sexually active adolescents will actually increase.

TABLE 3

Percent Unmarried Women Experiencing Sexual Intercourse, 1971 and 1976

	1976	1971	Percent Increase
15-19	36.9	26.8	30.2
15	18.0	13.8	30.4
16	25.4	21.2	19.8
17	40.9	26.6	53.8
18	45.2	36.8	22.8
19	55.2	46.8	17.9

Source: Melvin Zelnik & John F. Kantner, "Sexual & Contraceptive Experience of Young Unmarried Women" Family Planning Perspectives Vol. 9 No. 2 March/April 1977

There are many factors of teenage reproductive behavior that challenge against the conclusions that teenage reproduction is not a cause for concern.

1. The birth rates for adolescents (under 18) have declined very little from all-time highs and showed increases from 1971 to 1973. Birth rates--especially for the young adolescents--are still disturbingly high.
2. Even with declining rates there are, and will continue to be, large numbers of babies born to young adolescent mothers. The peak

of the baby boom was the first of a slow wave; we will have larger than average numbers of adolescents for many years to come.

3. The trend has been for increasing proportions of births to adolescents--especially to young adolescents--to occur outside marriage. Out-of-wedlock births are more likely to require Government-sponsored services. The growth in out-of-wedlock births to women under 18 has been from 48,300 in 1960 to 105,600 in 1970 to 126,800 in 1976.

4. The number of legal abortions continues to increase and teenagers continue to account for one-third of the total. In 1976 women under age 20 received 370,000 abortions--over 15,000 of them to women under age 15. The changing status of abortion funding may reduce adolescents' access to this form of fertility control. The extent to which this would result in increased births and/or use of "cut-rate" abortions is not clear.

And a final reason for concern about teenage fertility is that for most young adolescents, pregnancies are unplanned and/or unwanted. The younger the women, the higher the chances a pregnancy will end in an abortion or an out-of-wedlock birth. The Johns Hopkins study shows that only 23% of the unmarried teenagers say they intended to become pregnant. A study in New York City by Dr. Harrier Presser showed 48% of the 15-19 year old new mothers regretted the timing of their birth and would have preferred to have had it later or not at all. Several years later 70% of these women reported that they would have preferred to have had the baby later.

Teenage childbearing is not a new phenomena, but there are characteristics of current reproductive behavior which merit our attention. I would like to enter into the record a booklet I have prepared on this subject.

¹Presser, Harrier B. "Early Motherhood: Ignorance or Bliss?". Family Planning Perspectives, Vol.6, #1, Winter 1974, pp.8-14.

Mr. BRADEMAS, Sir, you may proceed.

**STATEMENT OF JAMES F. JEKEL, ASSOCIATE PROFESSOR OF
PUBLIC HEALTH, YALE UNIVERSITY**

Dr. JEKEL. My name is James Jekel, associate professor of public health, Yale University, and I am here to testify in support of H.R. 12146, which is concerned with adolescent pregnancy. I am a physician with certification by the American Board of Preventive Medicine. I have been teaching at Yale University for 11 years and am currently associate professor of public health. During this time my main area of research has been concerned with school-age pregnancy and the evaluation of programs to help adolescents who have become pregnant. I am an author or coauthor of a research monograph and approximately 20 publications concerned with adolescent pregnancy and comprehensive services. I have been a member of the board of directors of the young mothers program in New Haven, Conn., and am on the board of directors of the National Alliance Concerned with School-Age Parents.

I am encouraged at the recent evidence of interest on the part of Congress in a problem which has been of deep concern to many of us for more than a decade.

As Congress considers this bill, I know there are a number of questions that have been troubling many Members of Congress. One is the practical question, "Wouldn't it be better to prevent the problem in the first place, rather than wait for it to occur and then try to help out?" My response is that it certainly would be better to prevent truly unwanted children, and that to the extent that they are being produced, this issue should be forcefully addressed. However, I cannot agree with a further conclusion that the bill before us, therefore, should be only a prevention-oriented bill. This aspect is important, but it is already being addressed to some extent through other Federal programs, and even if all of the clearly unwanted pregnancies were prevented, there would still be several hundred thousand children born each year to teenagers. There is abundant evidence that we cannot eliminate all, or most, of the teenage pregnancies, so that we must face up to how to deal with those that will continue to occur for the foreseeable future.

The young mother who has had one child has usually found out that having children in her circumstances is not a bed of roses, and she is usually motivated to delay the next child for a considerable period of time. Our studies, and those of others, have shown that the special programs can help the young mothers to delay subsequent pregnancies, but when help ceases and they are left to fend for themselves, they often have a difficult time controlling their own fertility.

One reason programs for those already pregnant are important is that the second and third (and higher) pregnancies to women still in their teens are at extremely high risk for prematurity and perinatal death; I am enclosing a copy of a study of ours which demonstrates this fact. The programs for those already pregnant can help to prevent these very-high-risk subsequent pregnancies. Moreover, it is especially those who continue to have children while still teenagers who end up as burdens to themselves and to society. The first pregnancy identified them as a high-risk group

for efficient, targeted help to keep them in school and to help them to avoid rapid subsequent pregnancies, as well as to become better parents. I am attaching a copy of a study of ours which demonstrated that it was not whether they accepted contraceptives at their postpartum visit that predicted who would become pregnant again quickly, but rather, who returned to school. Those who returned to school after the first pregnancy tended not to become pregnant again quickly; those who dropped out of school did.

A second concern of Congress is that we would be "rewarding" the teenagers by providing them services. The implication is that coordinated, high-quality medical care, high school education and day care—to enable them to continue the education—counseling services, contraceptive services, and parenting education are a "reward." It is difficult for me to see how these are a "reward," either in the sense that they are somehow fun, or in the sense that they should be denied as a punishment. We hold in this Nation that basic education, medical care, and family planning services are a right for women in our society, and are necessary for the social good, so that women can plan their lives, become employable, productive citizens, and produce healthy children. How can we maintain that these are rights for older women but only a reward for the teenagers who need them even more? Purely on the basis of social self-interest, whether the young mother has made a mistake or not, our country cannot afford to abandon them to economic unproductivity and to welfare, to producing unhealthy or retarded children, or to having subsequent children that are unwanted. I am not in favor of rewarding the young mothers for having children at an early age, but as a society, we dare not abandon them at such a time of crisis in their lives. To do so is neither for their benefit or for society's. To give the young mothers help is more like throwing a buoyant lifesaver to a drowning person than giving a candy lifesaver to a child as a reward.

Our studies showed that for urban teenage women, comprehensive services do make a significant difference for the duration of the help and for a time after services ceased, in areas such as health of the mother and child, continuing education, and fertility control. I am attaching a number of papers, and a monograph, which document this. I do not want to leave you with the idea that there is any magic in these services; they by no means solved all of the problems of the inner-city teenage mothers. Nevertheless, the impact was greater than that seen in the evaluation of many assistance programs going today, and we believe the impact would have been still greater if the assistance to the young mothers could have been continued for a longer duration.

I do want to go on record as supporting H.R. 12146 in its general outlines. However, I do recommend consideration of a role for State government in policy formation, needs assessment, and linking services. My comments along this line are contained in written testimony I gave to Senator Harrison's committee, a copy of which is attached.

Also, I believe it is important to require much more extensive evaluation, and to designate a sum of money to evaluation. I would recommend 3 percent of the appropriated funds to be designated for the sole purpose of evaluation.

Thank you for the opportunity to present these views.

Mr. BRADEMAs. Thank you.

You indicate, if I understood you correctly, that you have found, in respect to preventing second pregnancies among teenagers, that more consequential than the availability of contraceptives is that they return to school.

What have you found to be the most significant facts in prevention of the initial pregnancy among teenagers?

Dr. JEKEL. Our studies have not focused on this issue. But again, many of those who are pregnant and keep their children, who go on to deliver teenage pregnancies, have dropped out of school. Many of these can be brought back into the educational system through special programs. It is my conviction from the evidence that with the assistance of contraceptives, much more effective for those who have found education can be meaningful to them and are working toward a specific end to complete their education.

We found, for example, although there was acceptance of contraceptives at the time of their 6-week postpartum visit, they were found to be using the contraceptives more than those who had dropped out of school. So we question whether staying in school was associated with use of contraceptives, or is it because the school helps them to prevent subsequent pregnancies, or is it because they are educationally motivated?

We did find out those who dropped out of school did not have babysitters. Most of these were extremely lonely young women, out of the mainstream of society, and this in itself predisposes them to becoming pregnant rather rapidly. So it is possible, those who are more motivated are more likely to stay in school and use contraception, but also those who are unable to continue their education are more at risk.

Mr. BRADEMAs. Does either of you have any judgment on the effect on the number of pregnant teenagers bringing their pregnancies to term as a result of the recent prohibition of medicaid funding for abortions? That is to say, is there any statistical information to which you can refer on the correlation between the number of teenage pregnancies and abortions as a consequence of this Federal action?

Dr. BALDWIN. There are no statistics available that would allow us to look at that.

Mr. BRADEMAs. I have a number of other questions, but I will yield to my colleagues.

Mr. Miller.

Mr. MILLER. Thank you.

Mr. JEKEL. For those students who remain in school, are you suggesting they were more highly motivated than those who dropped out of school?

Dr. JEKEL. This is a possibility, but those who dropped out of school were having difficulty in finding child care arrangements. So having the child and not having child care arrangements already tends to isolate them from the expected track of schooling and preparation for their later employability.

Mr. MILLER. So it may be a lack of services rather than motivation?

Dr. JEKEL. That is correct, and in many cases there is no doubt this is true. I am also saying it is also possible many of them decide to drop out of school and get married, but a majority of the cases they would return to school if there were adequate services to enable them to do this.

Mr. MILLER. Miss Baldwin, in your testimony, you state that only 23 percent of those under 19 intended to become pregnant, according to a Johns Hopkins study. Is this not a fairly high number?

Dr. BALDWIN. That is of the women unmarried at the time their pregnancy was unresolved. Are you surprised it is as high as it is?

Mr. MILLER. Yes.

Dr. BALDWIN. A number of those women had their babies, and it is hard for us to say what goes into that calculus as to why they decided to get pregnant, whether they felt their boyfriend would marry them or whether they were using that pregnancy to leave home.

Mr. MILLER. At what point were the studies made?

Dr. BALDWIN. This is retrospective about the pregnancy, so it is data which goes back to the time you became pregnant, did you intend to become pregnant. It is very unclear as to when a pregnancy is wanted. "Intend" is a clearer measure, but even there there are problems. The standard technique is to go back and ask, "At the time you became pregnant, did you intend to become pregnant?"

Mr. MILLER. We do not know what the breakdown of that 23 percent is, in terms of age, do we?

Dr. BALDWIN. No.

Mr. MILLER. I do not know if that is an irrational decision or not. I can think of a lot of reasons why you may want to have a child, but not necessarily want to have a husband around.

Dr. BALDWIN. That is another problem in dealing with these figures, it is a question what went into making that decision. What the young woman expected would happen may be very different from what happened in relationship to him.

Mr. MILLER. Chairman Brademas asked what did you know about primary prevention, and you indicated you had not gone into that, but somehow you indicated if the young person could be kept in school or given the supportive services to return to school they were more likely not to become pregnant than the group that dropped out.

Was not there a project in Baltimore at one time where they took young students in school, young females, and took them through the process in the hospital from the day they find out they are pregnant, they went to the doctor's and talked about it, the hospital room and what have you, and there was a significant number of young women who became pregnant later?

Dr. JEKEL. A study by Dr. Gordis, an attempt to, as to primary prevention. A number of the women had become pregnant. It was not established with a control group so it is not clear how many were prevented compared to what would have happened in the absence of this primary prevention program. But a number of the women did become pregnant. All that I am aware that we know of at the present time is that undoubtedly the availability of services

will make some difference, but that as indicated, a fair proportion of the teenage pregnancies are desired.

In the testimony on the Senate side, this was indicated by at least one of the teenage witnesses. I think we have to face up to the fact that primary prevention will not work if the pregnancy is desired, and we do not know the motivation which goes into this. As Dr. Morrel and Dr. Litz stated, pregnancy occurs when the need to be pregnant is greater than the need not to be pregnant.

I am not sure a young mother is sure herself whether she does or does not want to become pregnant at a given point in time, and whether she will report that accurately. We do not understand the motivation fully, but certainly in our studies a significant proportion of the young women indicated they were looking forward to pregnancy and were looking forward to that pregnancy.

Dr. BALDWIN. There was a study as to intentions, and it was found it was not because they had a strong motivation, but a strong proportion did not care. This seems to be something we could hope to intervene in. It is different when dealing with adolescents saying they really wanted to have a baby. Some of it was weak motivation and some lack of knowledge as to whether contraceptives could be obtained.

Mr. MILLER [presiding]. Thank you.

Mr. Kildee.

Mr. KILDEE. Michigan lifted a ban recently on the teaching of contraceptives. Other States have not done that. Have you found any significant difference in the incidence of teenage pregnancy where contraceptive education is permitted, as opposed to where it is not permitted?

Dr. BALDWIN. The quality of sex education varies so widely. You would have to specify whether the educational programs came prior to pregnancy. But as far as an overall assessment State by State, there is very little evidence along those lines. It is very difficult research to do.

Mr. KILDEE. Have you any information as to how many States yet still forbid the teaching of contraception in the sex education classes?

I know there was a terrific battle in attempting to get its inclusion in Michigan. I was wondering how many States have State laws which prohibit the teaching of contraception?

Dr. BALDWIN. I do not know.

Mr. KILDEE. It would be interesting to compare comparable States to see whether it did have any effect on incidence.

Dr. BALDWIN. I think there is such terrific variability.

Mr. KILDEE. Many of those who supported this when I was in the Michigan Senate felt it would be a means of decreasing the number of teenage pregnancies, but we really never had any hard data on it. It would be very valuable if we could get some data.

Dr. BALDWIN. There is some indirect evidence if you look at the extent to which girls do not use contraceptives because they think they cannot become pregnant. We know a very high proportion of adolescents believe they cannot become pregnant because it is the wrong time of the month, because they do not have sex often enough, et cetera. There is certainly a good case for the value of sex education.

Mr. KILDEE. That was our feeling among those of us who sought to break the ban, but we were hard pressed to find data to support that.

Dr. BALDWIN. It is difficult to give an assessment of sex education to the birth rate, but we do have pieces of it.

Mr. KILDEE. Thank you very much.

That is all, Mr. Miller.

Mr. MILLER. Just quickly, Miss Baldwin, again back on page 7 of your testimony, you state in 1976 women under age 20 received 370,000 abortions—over 15,000 of them to women under the age of 15.

You had about 571,000 live births in that same period, page 2 and page 7, if I am reading it correctly.

Dr. BALDWIN. Yes, that is correct.

Mr. MILLER. So about 60 percent of those people chose to have abortions.

Dr. BALDWIN. There is a smaller number of abortions than live births.

Mr. MILLER. The percentage is not terribly important, but the point is, I guess as we start to restrict the avenue for abortions to those individuals, I read a story in the Los Angeles Times last week, we can look for a whole series of problems that I am sure the Congress would never anticipate in taking their actions, but other people who are professionals in the field would anticipate.

What do we know about the births which took place to the women under 15? You say 15,000 in terms of low birth rate in terms of the health of that child.

Dr. BALDWIN. We know the babies born of the very young mothers are more likely to have problems in pregnancy, the young woman is less likely to come for prenatal care, we know that early prenatal care is very important for the development of the baby. We know for the younger mothers, they are less likely to obtain prenatal care and if so, to obtain it late in their pregnancy. The younger woman is more likely to have complications in delivery; the baby is more likely to be of low birth weight.

Mr. MILLER. Does anybody take a look to see what kind of educational program you would have to conduct to prevent those 370,000 abortions? What would you have to do?

Dr. BALDWIN. To prevent all of them?

Mr. MILLER. Half of them? You pick the number. I just want to know to reach that number of young women, from 15 to 20, to give them an alternative to that abortion when the decision is made they do not want that child.

Dr. BALDWIN. You are talking about an alternative, once they are already pregnant?

Mr. MILLER. No, prior to their pregnancy. There is a program envisioned in this legislation. Is it realistic? Because I am sure that figure has something to do with motivation for the legislation.

Dr. BALDWIN. In terms of prevention, obviously the most important thing to be doing is family planning services for those sexually active and do not want to become mothers. What is required in terms of a sex education program, as well as providing services to them, I am not in a position to give you a dollar figure as to a complete and perfect package, the legislation package, assuming

that would increase, hoping that would increase after the first year. But I do not think we can, at this point, say everything that would be needed to eliminate all of those.

Mr. MILLER. Let me ask you this question, and either one of you can, and maybe other panelists will respond to it. I assume some of this would go through our existing school systems. Do you believe there is a structure there in which you could hang this kind of educational program on to have the kind of success the proponents of this program would anticipate or hope for?

Dr. BALDWIN. There are a number of different ways to implement a broad educational program. Obviously, some would be through the existing educational system, others through the community, through clinics. There is no one approach which would be the best or only one we would pursue. There is research underway assessing the different approaches being taken now. This will be important for us to look at. I do not think we know now exactly the best approach for a community to take.

Mr. MILLER. What percentage of these teenage pregnancies or these young people are in school at the time they become pregnant?

Dr. BALDWIN. At the time they become pregnant? I don't know offhand. We know the proportion that are under 18 and of those young women still in school.

Mr. MILLER. They were involved in school at the time they became pregnant?

Dr. BALDWIN. And some of the 18-year-olds were probably in school when they became pregnant, but even of these who were in school, they became sexually active.

Mr. MILLER. Thank you very much.

Thank you for your testimony.

Next the committee will hear from the program services panel, from Janet Hardy, Emily Palmer, and Chris Mooney.

Welcome to the committee and, again, because of the number of witnesses we have left, to the extent that you can summarize it would be helpful because, as you can see, so far the testimony has raised a number of questions in our minds and we would like to be able to have that exchange, so if you would just identify yourselves for the record you may proceed in any fashion you would like. You can draw straws.

STATEMENT OF JANET B. HARDY, PROFESSOR OF PEDIATRICS, THE JOHNS HOPKINS UNIVERSITY, BALTIMORE, MD.

Dr. HARDY. I am Dr. Janet Hardy.

I am professor of pediatrics and health services administration at the Johns Hopkins University.

I am codirector of the Johns Hopkins Center for School-Aged Mothers and Their Children.

I have submitted written testimony, and it touches on some of the same points that Dr. Richmond made, so I am not going to take the time to repeat it.

[The prepared testimony of Janet Hardy follows:]

Testimony in Support of the Administration's Initiative in Adolescent Pregnancy

Before: The House Select Committee on Education

Monday, July 24th 1978

By: Janet B. Hardy, M.D. - Professor of Pediatrics
The Johns Hopkins University

Gentlemen:

May I thank you for permitting me to testify in support of the Administration's Initiative in Adolescent Pregnancy. This is a matter of great concern to me and one with which I have had considerable experience. My testimony will touch briefly on three areas:

- (1) the National scope of the problem
- (2) the research findings of the Johns Hopkins group
- (3) proposed solutions to the problem.

First, let me qualify myself. I am Professor of Pediatrics in the Johns Hopkins School of Medicine and Professor of Health Services Administration in the Johns Hopkins School of Hygiene and Public Health. For many years, I have been Director of the Johns Hopkins Child Development Study and for the past several years deeply involved in the Johns Hopkins Center for School-Aged Mothers and Their Children. As co-director of the Center, I have had responsibility for overall program development with direct responsibility for the development of the follow-up component.

- (1) National Scope of Problem - as the Administration has pointed out, the problem is extensive in terms of numbers involved

and enormously costly to society in terms of money spent for medical care, special education, welfare support and lost productivity. Today, approximately one of every five babies born in the U.S. is born to a teenaged mother. Of the nearly one million teenagers who become pregnant each year, 400,000 are adolescents (i.e., the mother is 17 years or under) and 30,000 are less than 15 years when they give birth. In our experience, a high proportion of these children are unplanned and unwanted. Almost 300,000 elective abortions among teenagers were reported in 1975.

It is toward the problems of adolescent mothers (i.e., 17 years and below) and their children that I wish to direct your attention. They constitute a particularly high risk group and, in my view, should be the target of the Administration's initiative. As this is a considerably smaller group, concentration of new resources and effort should be more productive.

On a national level, the birth rate in all age groups, with the exception of the teenagers, has shown a significant decline over the past decade and, according to recent reports from the National Center for Vital Statistics, the rate for 18 and 19 year olds has also turned down slightly. As sexual activity has increased, this must reflect the availability and use of family planning and elective abortion.

Data from the National Collaborative Perinatal Study (NINCS) has shown that 18 and 19 year old mothers have the lowest risk of perinatal mortality of any age group. However, the birth rate for adolescents, i.e., 17 years of age and below, has continued to rise.

In my experience, the problems stemming from adolescent pregnancy result from interaction between biological and social factors related, in large part, to the immaturity of the mother. The important contribution of the biological factors tends to be overlooked. The mother is physically immature, and often in her adolescent growth spurt. She is at high risk of complications of pregnancy, labor and delivery, particularly anemia, toxemia of pregnancy and difficult delivery, all of which compromise the fetus, leading to risks of perinatal death and/or later neurological deficits, risks 2 to 3 times greater than those for the children of older women. The high rates of obstetrical complications and of premature delivery among adolescents result in large costs for special medical care for the mothers, intensive neonatal care and in high risks of sub-optimal development in surviving children. Where special programs are not available 90% of adolescents drop out of school, do not complete their education and thus, limit their employment opportunities and are more likely to have more children and greater welfare dependency.

(2) The Johns Hopkins Child Development Study is a longitudinal research study for investigation of factors affecting child development in a large urban population of black and white children and their families. It has been ongoing since 1959. Of the 4800 pregnancies followed from the time of the first prenatal visit until surviving children reached 8 years, 688 were in adolescence, 17 years and below at the time of delivery. Examination of the data shows high risks of complications of pregnancy, low birth weight and perinatal and infant death for these pregnancies. In addition, the surviving children have, on the average, lower IQs and higher rates of school failure than the children of older women. These problems have been documented by others and it is toward new information, pertaining to the outcome for the adolescent mother, 12 years after the birth of her child, that I would call your attention.

The long-range outcome of a group of 77 adolescents 12 years after the birth of their first study child has been compared along a number of parameters of social well being, with the outcome for a group of primiparous women (20-24 years of age) thought to be in a more optimal age group for successful child bearing.

There is no question that the adolescent mothers in this study were at a serious disadvantage as compared with women in the older

age group with respect to a number of important variables strongly influencing the quality of life and one's ability to successfully nurture one's children.

The young mothers experienced a high degree of family instability, in terms of changes in marital status, as 45% experienced three or more changes during the 12 year period while only one of the older women experienced more than 2 changes and 43% had no change at all.

While maternal educational attainment improved considerably over the 12 years, with the younger mothers, in general, achieving considerably more education after the birth of their study child, than the older mothers, at the end of the 12 year period the adolescents were still far behind, with only 35% having graduated from high school as compared with 77% of the older mothers. Lower educational attainment was paralleled by lower occupational achievement, lower income and greater welfare dependency. At both the seven and twelve year follow-up levels only 44% of the young mothers and their families were fully self-supporting as contrasted with 67% of the older mothers and their families, at the 7 year level and 71% at the 12 year level. The average annual level of social service support in money for these young mothers and their children was \$2,147 at the 7 year follow-up.

and at the 12 year follow-up it had increased to \$2,919, a meager sum from which to provide the resources for a family with an average of 3.25 children. The employment history showed that, on the average, these young women worked slightly less than 20% of the time during the 12 year period, for an average of about 29 months in all.

Increased fertility (47% repeat pregnancies within 1 year and 70% within 3 years), in terms of both live births and fetal deaths undoubtedly complicated the picture for the young mothers, resulting in further taxing of already seriously limited resources, even though public funds through medical assistance provided coverage for medical costs.

It seems likely that having responsibility for rearing a child, frequently without the help of a husband or father, particularly when limited in education and material resources, posed a serious burden which put severe limitations on the educational and employment attainments of these young women. These problems were compounded by the birth of additional children soon after the first, further taxing their resources and ability to cope. An investigation carried out when their study children were 8 years old showed that 70% of these women knew contraception was possible but lacked the basic information needed to control their fertility and to instruct their children about human reproduction.

It is important to emphasize that these differences between the adolescent mothers and those in an older and more favorable age range are based on grouped data and that considerable diversity in outcome actually exists within both the adolescent and control groups. Some adolescent mothers were able to complete their education, develop stable family environments and raise successful children.

(3) Current experience in The Johns Hopkins Center, with a large number of pregnant adolescents and their children strongly suggests that intervention designed to prevent or minimize the mix of biological and environmental problems which relate to adverse outcomes can be highly effective.

(a) Good prenatal care can reduce risks of perinatal death, low birth weight and central nervous system injury;

(b) Supportive psycho-social and educational services during pregnancy, and the hospital stay, can help the young mother deliver a healthy baby and prepare for parenthood;

(c) An ongoing follow-up program can help the young family establish a stable environment for child rearing. Ongoing birth control services, education and supplies can effectively reduce early repeat pregnancy (in our program to 5% within 12 months, 11% within 18 months after the birth of the first child). Individual psycho-social

screening and where needed diagnosis can help young mothers re-enter school or obtain placement in work study programs (87% are back in school after delivery) leading to regular employment. Information about parenting, child development, nutrition, drugs, alcohol, etc. can result in improved adolescent and child health and reduce the risk of child abuse and neglect.

Furthermore, present ongoing research, sponsored by the Office of Child Development, indicates that urban adolescents have, in general, little accurate information about reproduction, contraception, child development and parenting. While difficult to measure, the intervention to supply needed information are not only effective with the adolescent mother, but have a ripple effect extending beyond the adolescent served, providing primary prevention for her siblings and friends, who like herself are vulnerable to adolescent pregnancy and its consequences.

The Johns Hopkins program has several unusual features:

- (a) fathers are included in the educational program both prenatally and in the Follow-Up where special group discussions on family planning, drugs, child care and other topics are organized; (b) there are unusually close working relationships with other community agencies including the Baltimore City Departments of Social Services, Education, Health, Recreation, Manpower, Job Corps and private agencies such

as Florence-Crittendon. Members of the Center staff serve on advisory committees or boards of these organizations and provide consultant services helping to develop policy in the area of adolescent needs; (c) the young mothers in the group educational sessions are encouraged to help each other; (d) the follow-up period has been extended to 3 years so that support may be available where needed until the child can be entered in Head Start or some other community program for three year olds.

In Summary

The problems stemming from pregnancy in adolescent women are a serious problem. They stem from the physical and psycho-social immaturity which, in many instances, lead to complications of pregnancy and fetal damage on the one hand and to a less than adequate family environment in which to nurture children on the other. Our program strongly suggests that intervention is effective: (1) in preventing or mitigating many of the problems; (2) in helping the adolescent mother to delay future pregnancies, complete her education and to become a contributing member of society.

Finally, why not put all the emphasis on preventing that first adolescent pregnancy? Obviously that is the ideal solution. However, in my experience, it will be many years before we can attain that goal.

Family planning programs, where available, have had considerable success with the 18 and 19 year olds. They have, in general, failed the adolescents. Furthermore, there is no ideal contraceptive for these young people. Effective educational programs stressing family living, values clarification and personal responsibility, child development, parenting and health are desperately needed for all adolescents, boys and girls. Innovative after school programs utilizing the abundant energies of adolescents are needed as alternative activities. To deal with the urgent current problems of unwanted pregnancy, leadership in mobilizing community resources is a must. This is where the Administration Initiative can be vitally important in focusing attention and leading the way.

Janet B. Hardy, M.D.
Professor of Pediatrics
Co-Director, Center for
School-Aged Mothers
and Their Infants

Dr. HARDY: I have had two kinds of experiences which might be quite relevant here. One is I have been for many years Director of Child Development Study in which we had the opportunity to compare outcome for almost 700 adolescent pregnancies with those of older women in the same kind of population whose adverse outcomes that have been mentioned here today were clearly apparent.

I think we had the opportunity to follow mothers and their children until the children were 12, that is, for 12 years after the delivery of the adolescent mother, and to compare them with mothers who were 20 to 25 years of age.

There were some other striking differences. The children of adolescent mothers did significantly less well in school at 7 and 8 years of age.

The mothers had more children. The adolescent averaged 3.35 children in the 12 years. The older mothers had just over 2 children on the average.

The adolescent mothers had a much higher rate of welfare dependency, and only 44 percent of them were fully supported by earned income at the time the children were 12, as compared with over 70 percent of the mothers who were older at their first delivery.

I think that I would like to turn now to talk a bit about the service program which has been mounted by the Johns Hopkins Center for a number of years, and this program started as a hospital-based program for pregnant adolescents and it followed the girls through their pregnancy, providing educational services, which will be talked about by Miss Shipp, but also providing high quality medical care and other psychosocial services.

The young women made a post-partum visit, and that initially was the end of the program, because of repeat pregnancies on the one hand and because the others seem to be doing an inadequate job of parenting their children, leading to many health problems, it was decided to provide followup services.

For the past 2 years we have provided health supervision for mother and baby, family planning services, and rather intensive educational services and social services for the mothers, the baby, and the family.

It occurred to me that a member of your committee asked what number of young women, what number of people might be served by the resources that the administration's initiative would make available, and the point was missed that in addition to the 120,000 adolescents that was mentioned, would be their babies, a substantial number of young men who were the fathers of the babies, and some of the grandparents, and there is a multiplier factor in there which really got lost.

Speaking about the grandparents brings to mind a fact that I think is very important. In our current population of adolescents being served in the center, over 50 percent of the grandmothers were adolescents at the time they had their first pregnancy, and I think this is important not only in terms of the poor parenting and family planning information that we know is passed on to the adolescent mother herself, but I think it may be very important in

terms of attitudes toward pregnancy and the supervision of teenagers.

These mothers were not, these grandmothers were not supervised, obviously, as teenagers, and they do not pass onto their daughters the same attitudes that perhaps older mothers pass on, and they don't watch over their daughters as carefully.

We have been making a point of trying to include grandmothers in our educational program so that the parenting is improved from grandmother to mother as well as from mother to child.

I would like to say a little bit about the program.

We make a very real effort to keep the youngsters in school. Dr. Jekel pointed out the relationship between repeat pregnancies and schooling.

We provide educational guidance and counseling both in the prenatal period and during the followup. We provide educational testing, and it is quite striking that the urban girls with whom we deal are very poor in reading. On the average they are reading at a sixth grade level or below. Many of them have speech learning disabilities that have not been recognized, and when these are identified and sorted out and proper referral made to the school systems, then these girls are encouraged to remain in school.

Before the followup program started, about 80 to 90 percent of the girls were dropping out of school once their baby was born. Now that the followup program has been in existence, we have better than 85 percent of the girls remaining in school. We have a few girls going to college.

I would like to make one comment about community linkages and then I will cease. We have been very fortunate in Baltimore in that the Baltimore City Department of Education and the Social Services Department have been very receptive to the needs, the special needs, of adolescent parents. In fact, the City Department of Education was way ahead of us in terms of developing special school programs.

The Social Service Department has been quite creative in terms of putting up money for day care, in helping girls go on to local colleges and in making sure that the social service payments that are needed are made to the girls and not to her family, which has been the problem in some places.

We have had a very busy period for 2 or 3 years, but I think when the impetus is there, a great deal can be done to mobilize community resources, and while the amount of money being requested by the administration seems small in the face of the size of the problem, I believe it's a good beginning.

Thank you.

Mr. MILLER. Thank you.

Go ahead.

STATEMENT OF EMILY PALMER, EXECUTIVE DIRECTOR, LULA BELLE STEWART CENTER, DETROIT, MICH.

Ms. PALMER. Thank you, Mr. Chairman.

I am Emily Palmer, executive director of Lula Belle Stewart Center in Detroit.

Lula Belle Stewart Center is a comprehensive service agency, serving young single parents.

I would like to have been able to describe our program more in full. Since time will not permit, I would just like to say that it has been described as one of the most innovative programs in the country in the public affairs pamphlets that you might have access to.

I would also like to state I am in agreement with many of the statements Dr. Jekel made ahead of me, and also in regard to a question that was asked by Mr. Kildee. I believe.

I am aware that Louisiana is now the only State that does not permit sex education in schools.

Lula Belle Stewart Center is a member agency of the Florence Crittenton Division of the Child Welfare League of America.

Florence Crittenton has been serving pregnant women and young parents since 1883. The Child Welfare League was established in 1920, and is the national voluntary accrediting and standard setting organization for child welfare agencies in the United States.

It is a privately supported organization devoting its efforts completely to the improvement of care and services for children. There are nearly 400 child welfare agencies directly affiliated with the league, including representatives from all religious groups as well as nonsectarian public and private nonprofit agencies—177 of these provide services to unmarried parents.

The Florence Crittenton Association of America merged with the Child Welfare League at the beginning of 1976, establishing the Florence Crittenton Division within the Child Welfare League. The major programs of the 35 member agencies in the Florence Crittenton Division are focused on comprehensive services to pregnant adolescents and young parents and their infants.

The Lula Belle Stewart Center is a comprehensive center providing an array of services to pregnant adolescents, young parents, their children, and families.

I come here today on behalf of the Child Welfare League, in support of H.R. 12146, "The Adolescent Health Services and Pregnancy Prevention and Care Act of 1978."

We commend the Department of Health, Education, and Welfare for proposing a program to help this very underserved population. However, we are concerned that the bill does not sufficiently recognize the complex nature of services to pregnant adolescents and, as currently drafted, could very well result in the insufficient and haphazard provision of low-quality services.

Targeting the funds to services after conception is our first concern. Lula Belle Stewart Center, in keeping with national statistics, finds that 94 percent of the pregnant adolescents we serve keep their babies. We would like to see that this bill with its limited funding focus on providing services to pregnant adolescents and young parents.

We recognize prevention as a critical component of the continuum of services. We urge you, however, to take advantage of expanded title X funds for prevention programs.

Pregnant adolescents and teenage parents do need a multitude of services. This group is not facing just one crisis, that of pregnancy. They are also experiencing many related decisions and life-changing problems. These young women may be from foster home back-

grounds and have a history of school, emotional, and family problems. Any plan designed to "solve the problems" of adolescent teenagers must be sensitive to the numerous services needed to strengthen family life and prepare these adolescents for independent living.

H.R. 12146 addresses itself to the need for comprehensive programs and lists many essential core services. However, the list is not complete. Vital components of successful programs such as residential and day care are not given sufficient emphasis. If young mothers are to be encouraged to stay in school, certain supportive services are critical.

Teenagers cannot attend school or job training programs unless they are assured of quality day care for their children and infants. Nursery care for infants under 3 years is practically nonexistent. The list of licensed family day care providers is sparse. Many Crittenton Centers, including ours, have developed their own onsite infant care services while parents attend groups and classes at our facilities.

Residential care is another key supportive service. Often, when a girl becomes pregnant, her family is unable to cope with the situation. Both the girl and her parents may require time apart to sort out their emotions. Some families cannot tolerate the situation and will not allow the girl to remain at home.

Many foster families are unwilling to deal with the tensions that teenage pregnancy creates. Alternative living arrangements become quite important for adolescents. In Baltimore, the Johns Hopkins Center, recognizing this need, utilizes the residential services of the Crittenton Center.

Following delivery a family often expects the young women and baby to begin independent living. Many do not want to take on the responsibilities of the new family. Grandmothers may have full-time jobs. They are not anxious to begin anew the task of child-rearing. After delivery is the time when support services are most needed. Ironically, this is frequently the time when the least amount of services are available.

In the past few years, the Crittenton agencies have developed various innovative approaches to meeting this need. Some agencies provide apartment-type housing for mothers and babies. We operate a program of licensed foster homes for mothers and babies. However, these types of residential services are offered on a very limited basis and demand far exceeds the supply. Last year, we had 34 requests for this specialized foster care service, but could support only 11 placements.

We also run a "crisis homes" program which locates temporary arrangements for mothers and babies following delivery. This allows the girls some breathing space to get back on their feet. We recommend that the bill be amended to require that varied residential services be provided as a component of a comprehensive center. This should include developing new facilities or supporting existing facilities for: (a) The pregnant adolescent, and (b) the mother and infant in a supportive environment for up to 2 years after birth.

Another needed service that H.R. 12146 fails to address is transportation. Drop-in centers are a sound concept, but in large urban and sprawling suburban and rural areas they may be inaccessible.

We find that since the girls are in school during the day many of our classes need to be held in the late afternoon or evening. But Detroit covers a large geographic area and like other cities has never developed an adequate public transportation system.

It is also not safe, for girls to travel on buses in the evening hours. We operate two vehicles to provide this much-needed transportation component. Although this is very taxing on our resources, we would have no consistency in program attendance if we did not offer transportation.

These varied service components that are the responsibility of an effective comprehensive center illustrate the difficulty involved in setting up new programs. Linking services in order to offer an adequate program represents a constructive approach. However, since many of the services are currently nonexistent or extremely limited, "linking" would be of little consequence.

We recommend that the 50-percent limitation for services be increased to 75 services and 25 linkages. Most of the Crittenton agencies provide the services, but funding limitations prevent them from offering help to all in need. Last year, our center with its annual budget of almost \$400,000 served almost 600 adolescents.

Lula Belle Stewart was initially set up to serve the tricity area of Wayne, Oakland, and Macomb. In Wayne County alone 6,000 girls became pregnant every year. We are only able to work with 10 percent of this population.

Demonstration projects with declining funds are not in order, particularly in the face of escalating need. What is necessary is an ongoing Federal commitment to provide services to pregnant adolescents and young parents. At least \$60 million must be appropriated for fiscal year 1979, no less than \$90 million for fiscal year 1980, and no less than \$120 million for fiscal year 1981.

In addition to funding this program permanently at higher levels, the requirement for a 70-percent Federal contribution and 30 percent local matching funds should be lowered to 90 to 10. The 10 percent should be allowed to be provided through "inkind" matching, including donated space, goods, or services. This would coincide with title X, title XX, and other family planning programs.

Many communities have little local funding available for starting new programs and scarce local tax revenues are under severe pressure from competing interests. The Crittenton agency in Houston reports that private funds are extremely difficult to obtain in Texas.

Other limitations in H.R. 12146 lead us to believe that if the bill were enacted in its present form, few quality programs would be developed. The legislation lacks strong accountability provisions. If we are to have responsible agencies providing reliable and effective services, accountability is a must.

H.R. 12146 enumerates an optional list of core services. If the aim of the legislation is comprehensive services in one center or coordinated service is linked together, certain critical services should be mandated to assure that these goals are achieved.

Additionally, standards must be attached to any funds provided under this legislation if Federal funds are not to be used for ques-

tionable undertakings. We assure that all services offered meet high standards.

For example, our center has hired a staff person who is responsible solely for licensing quality foster homes to assure that placements are successful. We recommend that language be added to the bill mandating service standards. This could be a provision stating that:

All services funded in whole or in part by this legislation shall meet appropriate federal standards and guidelines or the requirements of nationally recognized accrediting bodies for these services.

Regulations could further detail such standards. To further insure accountability, individual evaluations for each program and overall evaluation must be mandated. We suggest setting aside 3 to 5 percent of funds for evaluation. We also feel that in H.R. 12146 the lack of specificity necessitates the establishment of an advisory council to work with HEW to develop necessary evaluation criteria regulations to guarantee that the comprehensive focus be maintained. The council should include experienced service providers from the social services, health, and education fields.

Additionally, we recommend that HEW's Secretary place this program under the Office of Human Development Services rather than under the Office of Population Affairs to insure that the social services focus of the program be maintained.

The legislation recognizes the need for technical assistance to communities. We would like this provision to be expanded to include priority assistance to existing centers so that they can expand their operations and develop linkages.

There does seem to be an assumption in this bill that good intentions will create good services. We have spent hours with both Michigan and out-of-State groups working to initiate new programs or expand existing centers. In fact, we are now devoting a disproportionate amount of our time to this function. Groups will require ongoing and serious support to begin and run effective programs.

We commend the committee for holding these hearings and recognizing the needs of pregnant adolescents and young parents. We would like to reemphasize our concerns regarding the weak provisions and vague focus of H.R. 12146. Comprehensive centers can effectively serve the pregnant adolescent and young parent. However, services must include day care and residential services, both before and after delivery. A much higher percentage of the funds must be allotted to services or linkages will not develop.

Would these services be cost-effective? Program evaluation by LBSC and many of the other Florence Crittenton agencies indicate that many of the young parents we serve are assisted to return to school, enter job training or the employment market thus potentially reducing welfare costs tremendously.

A high percentage, 85 percent at Lula Belle Stewart Center in 1977, of babies born to adolescent parents who have been assisted by Florence Crittenton agencies to receive early and consistent prenatal care deliver full-term normal babies, thus reducing the risk of added medical and institutional costs for these children.

How can we not afford to offer services to pregnant girls and young parents?

I thank you for permitting me to testify.

Mr. MILLER. Thank you.
Ms. Mooney?

**STATEMENT OF CHRIS MOONEY, DIRECTOR, CENTER FOR
LIFE, PROVIDENCE HOSPITAL, WASHINGTON, D.C.**

Ms. MOONEY. Thank you.

In the interest of conserving time, I will just comment on what I
have put into my testimony here.

[Ms. Mooney's statement follows:]

Testimony on H.R. 12146, the "Adolescent Health Services
and Pregnancy Prevention and Care Act of 1976"

Ms. Chris Mooney
Director, Centet for Life
Providence Hospital

Thank you for allowing me the privilege of expressing my views on H.R. 12146.

My authority for offering this testimony is perhaps best described by my activities on behalf of young mothers and their children since 1969. In that year, as a young student mother myself, I helped organize and run a cooperative daycare center for students, faculty and the community on the Temple University campus in Philadelphia. This experience working with many economically deprived women and their children led to my increasing concern for the well-being of the immature mother-to-be and her unborn child. When my family relocated in the Washington, D. C. area, I founded a community-funded pregnancy counseling and referral service, Pregnancy Aid Centers, Inc., which has now expanded to two Maryland sites and is run by a volunteer staff of 42 persons. I am now the Director of the Center for Life at Providence Hospital in Washington, D. C. which is financed both by private donations and federal funding and offers a broad range of services and programs for people of all ages with special social and medical needs. This year the Center received the Annual Achievement Citation from the Catholic Hospital Association for its unique approach to solving human problems. The Center's "Reduced Fee Maternity Program" and "Natural Family Planning Clinic" are specifically relevant to the legislation before us today. Speaking on behalf of the Center, and having worked closely with hundreds of young, pregnant women, I would like to share with you some of my observations and concerns directly related to this legislation, specifically as it may impact upon my clients -- pregnant adolescents who are seeking an alternative to abortion.

As a pregnancy counselor in the Washington, D. C. area, I am aware of certain realities:

- 1) Most pregnant teens do not even remotely understand how their bodies work or how they became pregnant, and they are equally ignorant about the biological development of their baby in utero;

2) If a pregnant teenager does not qualify for medicaid coverage and is not adequately insured for pregnancy, she can expect to pay about \$1,200 for an average, uncomplicated pregnancy and delivery;

3) A pregnancy with complications (Caesarian section, toxemia, Prematurity, etc.) will usually cost no less than \$2,000, and frequently much more;

4) Affordable housing outside of her own home is scarce for the pregnant adolescent;

5) Affordable housing outside of her own home is non-existent for the pregnant adolescent with a special problem (i.e., mental illness, retardation, drug problem, criminal record, etc.);

6) Employment opportunities for pregnant women in general are remote, but for pregnant adolescents they are virtually non-existent;

7) Few unmarried pregnant adolescents receive initial emotional or financial support to deal with their pregnancies from family, friends, boyfriend, or the public sector if they choose to carry their baby;

8) Pregnant adolescents are frequently poorly nourished and ignorant of proper diet and health care during pregnancy;

9) An abortion can be easily attained and only costs \$120.

It is clear from the above that the pregnant teen who chooses to carry her pregnancy presently faces great hardship. In the face of these financial and social dis-

incentives to remain pregnant, about one-third of all pregnant teens each year abort.

From experience I know that many of them would choose to remain pregnant if it were not such a difficult road to travel. Whatever our personal feelings about teenage pregnancy, it is important that we assure that the "freedom to choose" between carrying the pregnancy or aborting is left to the judgement of the young, pregnant woman, herself. By making remaining pregnant such a difficult option, we are abridging this freedom for many young women. Consequently, my main concern in reviewing this legislation was to see how it might favorably affect a woman's right to remain pregnant, if she so chooses. It appears to me that H.R. 12166 would assist young women seeking to continue a preg-

nancy by providing free or affordable prenatal and maternity care; by exposing adolescents to new knowledge about their reproductive biology which may help foster greater self-respect and responsibility during reproductive decision-making; by expanding employment and schooling opportunities for pregnant and post-partum adolescent women; by promoting nutritional guidance for her; and by making possible the many other services enumerated under "Uses of Grant". One crucial problem which is not specifically addressed by this legislation (although it may be implied) is the problem of emergency housing during and after pregnancy. Three or four times each month my agency is asked to help find emergency housing for a pregnant or post-partum young woman, only to find that there is none available. For the pregnant adolescent this lack of shelter is often the "straw that breaks the camel's back" and results in what I would call an "unwanted" abortion -- an abortion caused by lack of social resources to continue the pregnancy. The institutional group homes for pregnant women which do exist in our community are too expensive for most of the women we assist, they have a waiting period for admission which does not accommodate the woman in a crisis situation who needs immediate help, and none provide shelter on a long-term post-partum basis when this is needed for the woman to become "a productive independent contributor to family and community life." I believe this need should be specifically mentioned in any legislation which attempts to deal with the needs of pregnant young women.

I would like to dwell now on the high cost of hospital maternal delivery services. Assuming that Washington, D. C. is not atypically expensive, it would seem to me that insuring this service alone to pregnant teens would deplete the \$60 million appropriated in this legislation. I would be interested to know to what extent the drafters of this legislation have taken into account the exorbitant expense of maternal hospital delivery, and how many women are projected to receive hospital delivery under the appropriation. As I mentioned above, the lack of affordable delivery services is the greatest problem for the pregnant teenager, I counsel.

Throughout the bill the prevention of pregnancy among adolescents is reiterated as a major goal. I am in total agreement with the need to prevent teenage pregnancy. I am encouraged that the bill does contain a provision for innovative approaches to this problem. I feel a word of caution is in order, however, insofar as it seems that this bill would funnel large sums of money into traditional family planning programs to provide contraceptives to teens. There is evidence to raise doubt concerning the effectiveness of this approach. The study done by Johns Hopkins researchers, Melvin Zelnick and John Kantet, showed that more teenagers (about 20% more than in 1971) today use contraceptives. Yet the Alan Guttmacher Institute indicates in their recent publication on teenage pregnancy that the rate of pregnancy among teens continues to rise. Because this superficial evidence seems to suggest that the traditional contraceptive approach may not be effective in preventing adolescent pregnancy, perhaps greater emphasis should be placed on studying the problem further and, hopefully, finding new approaches.

All in all, I believe this legislation is a step in the right direction. Clearly something must be done to assist adolescents in making appropriate reproductive decisions which will give them the greatest opportunity to lead happy, productive lives. My greatest concern is that we not approach the problem overzealously -- as if we were "stamping out" an infectious disease. Pregnancy is a normal outcome of normal sexual activity. Teens need to see their procreative abilities as a wonderful, powerful gift which must be intelligently used in the context of their goals in life. If we can help them attain this understanding, we will go far in preventing unintended pregnancy among our youth.

technique. Class A agencies were those providing health, education, and social services to adolescents during pregnancy and for a clearly defined period postpartum. Class B agencies provide services in any two of the above categories and Class C agencies offer support in one of these areas only. Within the social services category, infant/child day care was included as a primary service requirement.

The basic data collection method for this survey was an extensive questionnaire followed up in 40 of the 50 communities by a site visit from MACSAP staff or a consultant. Anecdotal information was also obtained during the site visits to augment the standardized questionnaire. The findings of this survey along with the findings of a 13-state school-age parent needs assessment project conducted by MACSAP in 1975 would suggest that the assumption that basic services are already in place for young parents and need only to be linked or coordinated is misleading. While this is sometimes the case in large urban areas, it is an inaccurate reflection of the state-of-the-art in suburban and rural communities. In fact, in rural and suburban communities, the attitudinal issues of adolescent sexuality are just beginning to be dealt with and this process precludes the advent of services. Funds for use by state and local agencies for purposes of coordination will, no doubt, be helpful. Nonetheless, funds for the purpose of coordinating existing services will not supplant the need for services not yet in place.

By way of illustration, all of the agencies that participated in the 1977 MACSAP survey identified infant and child day care as a resource that was critically needed but which was unavailable regardless of the location of the program in an urban or rural area. Other services which the participating agencies viewed as essential but which were largely unavailable as of the spring of 1977 were: 1) group homes and/or

residential care for young women who are unable to remain with their families during the pregnancy; 2) services for adolescent fathers; 3) comprehensive school health/sex education/family life/prenatal education courses; 4) decisionmaking training for adolescents; 5) transportation; and 6) long term follow-through support for a minimum of two years following delivery.

With respect to follow-through services, providers have indicated that to effect this dimension of a program, it is essential that staff be available to engage in pro-active outreach with clients or students with whom they have had previous contact in a special program. However, since resources have been limited in terms of responding to young people who are pregnant, minimal attention has been focused on long term follow-through. Yet, it is a central factor as a means of reinforcing the concepts and training afforded by special prenatal programs and it also ensures emphasis of the considerations that influence young people in helping them avoid early, unintended repeat pregnancies.

The services identified above are those which agency staff reported as being needed among service providers participating in the 1977 survey. These services, however, do not by themselves represent the core support

which MACSAP recommends as a comprehensive approach for meeting the needs of pregnant adolescents, young parents, and their families. What are these core services? The three key components of a core services approach--each of which is an integral part of any comprehensive strategy--are health, education, and social services. Listed below are the chief elements included in each of these areas. All should be available to pregnant adolescents, young parents and their families during the course of a pregnancy and for a minimum of two years following delivery but will be used by consumers on the basis of individual needs. (NOTE: The costs associated with these services will vary by region, however, on the basis

of information made available by members of our association, it is estimated that a comprehensive approach will cost between \$1,500 and \$2,000 per client per year for the first year of support.)

CORE SERVICES

A. CLIENTS

HEALTH COMPONENT

General age-appropriate adolescent health services (includes dental and eye care)

Pregnancy Testing

Prenatal Care/Preparation for Labor & Delivery

Nutrition Information

Family Planning Counseling and Services

Pediatric Care

EDUCATIONAL COMPONENT

Regular academic school curriculum (A comprehensive parenting/health/sex/family life education course is included in MACSAP's concept of a regular academic curriculum).

Vocational Training/Job Placement

Consumer Education

Decisionmaking Training

SOCIAL SERVICES COMPONENT

Individual and Group Counseling
These services are intended to introduce all available options to pregnant adolescents regarding disposition of suspected or confirmed pregnancy.

(NOTE: Refers to involvement of adolescent fathers and extended family units.)

Psychological/Psychiatric Services

Developmental Infant/Child Day Care

Legal Services

Group Homes/Residential Care

Transportation

Financial Assistance (Includes reference to AFDC/MEDICAID support)

Adoption Services

B. SERVICE PROVIDERS

Regular in-service and/or pre-service training for administrators and staff associated with programs serving sexually active youth and young parents. (Basic training courses constitute technical assistance that would help staff develop skills in communicating with young parents and their families; apprise administrators of funding sources and regulations affecting programs; and, suggest means to document efforts, develop linkages, promote public awareness, and develop research designs.)

It is easy to see why comprehensive school-age parent programs are frequently an administrative enigma in view of the range of elements that need to be included in such efforts. However, overlooking any one of these key aspects can result in the breakdown of the service network. Following through on that point, it is important to recognize that H.R. 12146 is a predominantly health oriented bill. As it is now written it overlooks the Core services concept which incorporates health, education, and social services as equal partners in comprehensive program efforts. In fact, without the support from local and state education and social services agencies which has been directed toward this issue for the past several years, it is unlikely we would be here discussing this legislation today. Further, the schools must be looked upon as a central resource for both coordination and direct services to pregnant adolescents and school-age parents. Recognition and respect for the equality of the health, education, and social services partnership at the federal level will, in our opinion, facilitate the cooperation of personnel from all these disciplines at state and local levels and will help achieve successful outcomes for this program. If, however, H.R. 12146 is interpreted and ultimately administered as a predominantly health-based program, our experience would suggest that important contributions and the needed cooperation from associates in the fields of education and social service

will not be affected. This is especially significant when considering which institution has the greatest access to the young people, namely, the school.

I want to also make a point concerning Section 102 of H.R. 12146, specifically Item #6 pertaining to the use of grant funds for providing training. The proposed bill excludes support for institutional training or training and assistance provided by consultants. It appears that the idea is to draw upon the expertise of personnel presently associated with existing programs. In identifying core services for a comprehensive school-age parent program you will observe that NACSAP differentiated between the needs of clients and those who are working directly with young people. In-service training has been one type of technical assistance which NACSAP has offered in its program over the past few years often through specialized training courses and at other times through national conferences or individual consultant services. For example, to date, NACSAP has helped to develop and conduct state and regional in-service training courses in Oregon, Washington, Maryland, Louisiana, Texas, West Virginia, Illinois, Colorado, and Pennsylvania. In the case of Colorado and Pennsylvania, our representatives were participating as staff in regional programs developed by the Department of Health, Education, and Welfare. The course content was generally designed to help professionals and others who are working with sexually active youth and young parents reach an understanding about their own values and perceptions of self, sexuality, and parenting so that they can relate more effectively to young people and their families. In some instances the courses offered have been accredited by higher education institutions (e.g., University of Oregon, University of Texas/Galveston, and Eastern Washington State College at Cheney). Instructors in these courses have, in some cases, been independent consultants selected on the basis of their relevant expertise.

On the basis of its experience with these training programs, NACSAP recommends that a waiver clause be added to Item 6 to allow the use of funds for training by institutions and/or consultants pending review of the grantee's training methodology and faculty.

Item #6-E of Section 102 (Uses of Grants) imposes another restriction limiting any grantee from using in excess of 90% of its grant for services. Though a waiver is allowed, on the basis of the case made earlier about the lack of services in several communities, especially in suburban and rural areas, NACSAP strongly recommends that this restriction be revised to permit a grantee to use up to 75% of a grant for direct services.

NACSAP proposes two recommendations relevant to Section 104 of H. R. 12146 (Requirements for Grant Approval). First of all, a maintenance of effort clause needs to be added. In effect, this would be an insurance premium to guard against the possible redirection or withdrawal of existing state, local, and/or private funds that were previously generated to meet the needs of this population. This recommendation is made on the basis of a fundamental understanding and appreciation for the sensitive nature of adolescent parent programs and in recognition of the fact that in the context of other human service concerns, this is yet a relatively low priority in most communities.

The second consideration is with reference to Item #6 in Section 104. As written, this Item requires grantees to describe how adolescents needing services other than those provided directly by the grantee will be identified and how access and referral to those services will be achieved. Included in the services described as "other" is infant, day and drop-in care services for adolescent parents. Infant day care cannot be viewed as a luxury service for adolescent parents. It has been proven among our

constituents to be central to the concept of comprehensive services. Without it, the efforts to provide coordinated prenatal services are destined to a short-term impact, an impact which, for all practical purposes, terminates at the point when the adolescent mother who has delivered her baby and has kept the child (approximately 90% of the over 600,000 adolescents who carry pregnancies to term are estimated to be keeping their babies rather than placing them for adoption) attempts to return to school and finds there is no one to care for the baby when she returns to classes. As a central element in the core services program, developmental infant day care is difficult and costly to provide. However, some states, e.g., California, and local communities, can demonstrate that this is not an impossible resource to provide. NACSAP recommends, therefore, that infant/child day care be deleted from Item #6 (where it is referred to as other) and, inserted in Item #5 (Section 104) which includes a listing of core services.

Title II of H.R. 12146 (Improving Coordination of Federal and State Program) notes that the Secretary of DHEW will set aside up to 1% of the funds in this program for evaluation. From NACSAP's perspective this would appear to be an extremely limited allocation for an especially important aspect of comprehensive programs. The knowledge base concerning these programs is limited and predicated on the results of very few intervention strategies. NACSAP recommends that a minimum of 3% and a maximum of 5% of the funds be set aside for evaluation. Further, in the regulations, a definition of the evaluation design and the means for monitoring the evaluation components of the programs funded should be provided with appropriate means of adaptation to health, education, and/or social service-based approaches. All grantees should be required to incorporate an evaluation component in proposals for funding before qualifying for competition.

There are several references to technical assistance in H.R. 11146 which NACSAP believes to be a pivotal point in terms of the potential for success of the program in general and specifically in terms of the outcomes for individual grantees. Technical assistance plans must be developed for use by federal, state, and local agencies that are working in this field. At a minimum, the technical assistance associated with the program resulting from this legislation should make available to interested persons the following:

- 1) guidelines for needs assessment at state and local levels;
- 2) recommended procedures for developing and/or coordinating core services;
- 3) identification of research and evaluation techniques appropriate to various program designs; and,
- 4) suggested formats for documenting efforts on short and long-term bases.

In the work that NACSAP has been involved in in nearly 40 states over the past several years and through the network of programs with which the organization is associated, this is an area which we know to be vitally needed for getting a program started and then sustaining it. Without technical assistance resources such as those described, it will be difficult for H.R. 12146 to be effected successfully. NACSAP would hope to make a meaningful contribution to this part of the program.

In summary I would like to affirm once again NACSAP's general support for H.R. 12146. I would further emphasize and underscore, however, the need to strengthen this measure along the lines suggested so that a new program, were it to get underway, would not detract from or encumber the efforts which have already been taken to prevent adolescent pregnancies and/or to treat the needs of families involved in such a circumstance. This bill places considerable responsibility in the hands of those who

develop the regulations and subsequently chart the administrative course. Because of the complexity of such an effort as it relates to pregnant adolescents and young parents, which I hope has been characterized in my testimony, NACSAF's final recommendation is that DHEW be required to develop regulations and conduct this program in concert with an Advisory Committee comprised of persons with expertise in the provision of services; research and evaluation; and/or policymaking with respect to this population. Consumers should also be represented on this Committee. Without such a Committee, a Committee that could also relate to the other elements of the Teenage Pregnancy Initiative, it will be extremely difficult to implement this program. Personally, I am skeptical that the breadth and depth of expertise that is needed in such a comprehensive effort is in place at the Department of Health, Education, and Welfare at the present time.

Mr. Chairman, I am pleased to have had the opportunity to join the other witnesses in appearing before you today on behalf of young people who are at risk of pregnancy as well as on behalf of adolescent parents and their families. It would appear that H.R. 12146 has its greatest potential. If focused, as a beginning effort to address the needs of pregnant adolescents and young parents, NACSAF looks forward to working with you and other members of Congress and the Administration in promoting a comprehensive, cost-effective strategy which results in a successful, compassionate, and much needed Program which cannot constitutionally be delayed. Thank you for the opportunity to testify.

attachment: NACSAF MEMBERSHIP BROCHURE

THE ISSUE

Adolescent Pregnancy & Parenthood

- Pregnancy among 10 to 14 year olds has almost doubled since 1957. There were 6,960 births to women 10 to 14 in that year. In 1975 there were 12,642 births to women in that age group.
- While birth rates for 18-19 year olds are declining, pregnancy among 15-17 year olds is increasing. Births to younger teens—15-17 year olds—increased by 21.7 percent between 1966 and 1975.
- Births to single mothers 15-19 increased by 63.8 percent from 1966 to 1975.
- More women 14 and younger had abortions than delivered children in 1975. The typical woman receiving an abortion in 1975 was young, white, and unmarried.
- Racial differences among single parents are narrowing. In 1969 the birth rate for single black women 15-17 was about 11 times higher than the rate for single white women. By 1975 the differential was reduced to 8.

Source: National Center for Human Resources Research, a unit
of the U.S. Department of Health, Education and Welfare

THE ORGANIZATION

NACSAP

- NACSAP is the only national, multi-disciplinary membership organization concerned specifically with the resolution of the problems of adolescent parenthood.
- NACSAP specializes in technical assistance including publications, in-service training, conferences, program consultation, and advocacy.
- NACSAP has members in nearly all of the states and affiliates in California, Florida, Louisiana, Michigan, Ohio, Oregon, Texas, Washington, and Wisconsin. We are funded through membership dues, private contributions (which are tax-deductible), and government contracts.

NACSAP MEMBERSHIP APPLICATION

I want to meet the Challenge to Action by joining NACSAP! My check or money order, made payable to NACSAP, is enclosed. Dues and contributions are tax-deductible and include NACSAP and state affiliate membership where applicable.

Please complete the following:

- | | | |
|-------------------------------------|---|--|
| <input type="checkbox"/> NEW MEMBER | <input type="checkbox"/> \$2 Young Parent | <input type="checkbox"/> \$50 Sustaining |
| <input type="checkbox"/> RENEWAL | <input type="checkbox"/> \$20 Individual | <input type="checkbox"/> \$100 Patron |
| | <input type="checkbox"/> \$30 Family | <input type="checkbox"/> More than \$100 |

Myself Mr. Mrs. Mr.

Title

Address

Address

City

State

Zip

Telephone Area Code

☐ I would like to help NACSAP membership in my community. Please send me

membership applications to distribute in my area.

☐ Please send me additional information about the activities of my local affiliate. This applies to those in Calif., Florida, Louisiana, Michigan, Ohio, Oregon, Texas, Washington, and Wisconsin.

Please return this form to: NACSAP, 7315 Wisconsin Avenue, #211, W. Washington, D.C. 20014. Telephone: (301) 654-2338.

Ms. FORBUSH. In the first place, we have heard to some extent this morning about the inadequacy of a \$60 million new piece of legislation to address the needs of those youngsters who are already pregnant, young parents as well as those who are sexually active.

National Alliance Concerned with School-Aged Parents is in agreement that this \$60 million package is, indeed, much too limited. However, if the bill can be developed so that is, indeed, focused, we would recommend that it be focused on the needs of youngsters who already are pregnant or are young parents.

We feel that this could have a measurable impact on the developing program efforts and those that are already in place in several communities throughout the country. We would, however, go on to reiterate and emphasize the need for a maintenance of effort clause that needs to be incorporated so that efforts that have already been started will in no way be jeopardized.

Efforts at the community level and to some extent at State levels are only now just beginning. And this is not yet a popular issue. We feel several communities have made remarkable efforts, some we have heard about today. But there are several other communities we have not heard from on precisely those just beginning to do something for pregnant adolescents and young parents.

I am going to read a very brief letter our organization received shortly after we had completed a survey of 50 programs for school-aged parents which was conducted in 1977 with funds provided by the Joseph P. Kennedy, Jr., Foundation, and I read:

"DEAR FRIENDS OF NACSAP, I am afraid the information I have given you is quite incomplete for several reasons—

And I should add this has come to us from the Office of Social Concerns in Rapid City, S. Dak.

We are a small, new agency. However, our workers travel 1,000 miles a week to cover the wide range of desolate country to be of service to the outlying areas. Rapid City and Ellsworth Air Force Base do allow the pregnant girls to complete their education. However, many of the small rural towns do not.

Either the girls drop out for the semester or occasionally they will allow them to do their studies at home. This is one reason why we often bring girls to Rapid City for foster care during their pregnancy, so they can go to school.

I hope this information has been helpful. Sincerely—

* And it is signed by the social worker in the program.

I add that only to try to highlight the fact that there are several communities without services in place and obviously are looking outside their own immediate areas for support to respond to the needs of pregnant adolescents, young parents and their families.

In the study that we did complete for the Kennedy Foundation last year we found that a range of 2 to 15 percent of the population in need was presently being served.

We would, however, feel that in the interest of devoting some of the moneys allowed for H.R. 12146, that we would be supportive of allowing perhaps 25 to 35 percent of this money to be directed toward primary and prevention efforts that are demonstration-type projects in nature. We feel this then would allow us to build and develop the base of information which based on previous testimony this morning we can conclude might not be available to the extent that it is needed.

On another point that I would speak to, in section 102 of H.R. 12146, as the bill is presently written, there is a restriction with regard to the use of training funds. Precisely, the restriction is that agencies that would receive funds under this program would not be allowed to use consultants or institutions to support inservice training for people working with sexually active youth and young parents in the existing programs.

The National Alliance Concerned With School-Aged Parents has worked over the last 10 years in providing technical assistance to local, State, and national organizations interested in this issue. One of the types of technical assistance that we have provided includes inservice and preservice training to people who are concerned about the need to improve their own skills and relating to sexually active youth and young parents.

We have found that it has been inordinately helpful to involve consultants who are experts in their field, and also align ourselves with institutions of higher learning to conduct these training programs.

Therefore, we recommend a waiver be incorporated into the language of the bill to allow a grantee to use consultants or to align themselves with institutions based on the provision of a methodology in course background, and also the name of the consultants they would plan to choose.

This needs to be emphasized greatly, the need for an improved and expanded apportionment of funds for evaluation. To a great extent, the information that we have available from school-age-parent programs which have been in existence over the 5 to 10 years is sketchy. The data are not uniform which are collected in the various programs. Precisely, it is very difficult to obtain accurate information about the cost of providing services. You will note that in the testimony already provided here today there is a great range, in terms of the budget, the number of people served in programs, and also the outcomes not only for the clients, the young parents, their extended families, and the babies, but also what are the outcomes as measured against the objectives of the program. We recommend 3 percent be directed toward evaluation, and a maximum of 5 percent.

On page 8 of the written testimony, there is a listing of the core services which we feel are important to provide and have learned through our contact with over 1,500 programs throughout the country. We have found these services are indeed essential. With reference to the list of services which have been written into the proposed legislation, we find a couple of the services are not identified nor emphasized to the extent necessary. One is pregnancy testing, another infant day care. We have learned this morning of the importance of day care as a means of helping young women to remain in school. You do come to a state where there is legislation in place to allow school systems to establish day-care settings on high-school campuses.

We also feel strongly as to comprehensive planning, sex family life, and planning and this is an ingredient in many school curricula that is just being developed.

Last, we feel strongly as to the need for followthrough. We have learned in some programs they are able to provide some support

services for as long as 12 to 16 weeks after delivery. The models we have heard from this morning, the Johns Hopkins and Park program in Grand Rapids are perhaps exceptions in terms of follow-through support. This needs to be developed to make sure the long-term benefits are felt by the young people in the years to come.

I move to a point emphasized heavily this morning by Dr. Richmond, that is, technical assistance. Clearly the only one working in this program for a long time, we know the need is great. It is needed at local, State, and national levels. It ranges from making sure there is information about other programs made available to those just starting, as well as making available resources for service providers working with pregnant adolescents and young parents.

Another element is the need for support to State agencies which are just now beginning to coordinate their efforts but heretofore have not talked with one another as to the human-interest strategy. One of the needs we have, and this comes through every daily mailbag, is the need from State agencies. They are writing and asking how can we help such-and-such a program in a community to get started. We feel this is important. Similarly, policy coordination for State agencies and also those who are just beginning to respond to the need of adolescents.

I move to now the suggestion of establishing an advisory committee in making sure this program has maximum impact. There have been several questions raised in recent months since this initiative has been developed as to where the office would be housed in HEW. We heard a recommendation this morning from the Child Welfare Agency that the office should be housed in the Office of Human Development Services at HEW. There are others who feel it would benefit by being under the aegis of Dr. Richmond and his staff.

A last point that I would make is in reference to the cost estimates we have heard this morning, from \$750 a year to provide services, to \$2,000 a year. Much work needs to be done as this legislation moves forward to substantiate the cost figures being reported here.

Based on the contacts we have with our agencies and on the basis of the fact I have seen approximately 100 adolescent parent programs throughout this country, I think it is important that we help people pull out the information which will be useful in estimating how much it will cost in providing service to school-age parents and their families.

Thank you.

Mr. MILLER. Thank you.

STATEMENT OF MARJORY MECKLENBURG, PRESIDENT, AMERICAN CITIZENS CONCERNED FOR LIFE

Ms. MECKLENBURG. I am Marjory Mecklenburg. I am pleased to have this opportunity to testify in behalf of this bill. ACCL is a national pro-life organization founded during the last Congress. At that time we pledged in testimony before the Senate that we would work in partnership with the administration, Congress, and representatives of the private sector to insure that children both born and unborn were protected and cared about and that the opportu-

nities for achieving potential would become greater and that pregnant women and families have the services needed to bear and rear children with dignity and safety. This charge has given us a broad pro-life focus.

We have had an opportunity to work with coalitions including a wide variety of groups and it has given us an interest in a number of pieces of legislation.

The recommendations of the select committee consistently make a great difference in the quality of the lives of many people, especially young people, and we appreciate the work that you do.

The bill before us today is one which is needed to help pregnant adolescents and their children. We are pleased you are giving it your attention.

You have heard the various dimensions of the problems that pregnant adolescents and their children face, and also the potential for changing this dismal outcome with comprehensive services. We see many strengths in this bill and recommend its passage, but we would like to make several brief recommendations.

First, since it appears comprehensive programs are cost-effective and the need is so great, we recommend the money allocated be increased over the next 3 years. I sense a consensus here that the money is really not adequate to the task, and we would ask that it be increased.

We also see evaluation as a crucial element in monitoring and planning future programs and favor increasing the amount for evaluation.

Third, since this bill encourages cooperative effort between HEW and jurisdictions, we suggest they work with HEW in evaluating guidelines.

Fourth, we believe provision of abortion services should not be added to this bill.

It is rather exciting to me that groups of different opinions and policies on abortion can work together on legislation such as this to help women who choose to continue a pregnancy and to also be sure that adequate preventive services are available.

I think if abortion is not added to this bill, we can and have formed a broad coalition which can make significant progress in helping to eliminate the problems which lead to abortion and lead to a destructive pattern of life which you have heard about women who face special problems. I think the passage of this bill is too important to make it a battleground over abortion. That is why I am pleased to know the different pro-abortion groups are here. We hope it will usher in a new era in finding ways of preventing the problem and handling the problem once it has occurred.

Next, we favor using whatever portions of the funds in this bill are used for prevention, to be used for research, initiation and evaluation of educational programs in areas such as family life, preparation for parenthood and value-oriented sex education programs.

I would agree with Denese Shipp in her earlier testimony when she pointed out that contraceptive services, biological sex programs are very important, but there is a third facet, that of building human relationships, motivation, relationships with young men,

this kind of facet which is built into a prevention program which works.

We have quite adequate contraceptive funding through other pieces of legislation, at least significant, maybe I should say that. We need now to focus on how we are going to involve educational programs to provide the motivation to use these contraceptive services or to defer sexual activity, to raise the level of self-esteem of these young people to get them to value their own sexuality and to deal with the responsibilities which go with parenthood.

As some have pointed out, we do not know how to provide in this area. Mr. Kildee asked for hard data on sex information and the effect it can have on pregnancy. We have heard contraceptive education may possibly increase sexual activity, particularly if the contraceptives are not used with a continuing kind of motivation and support around the young people using them, if they are used sporadically, and in fact, they have failure and they may end up pregnant.

So, we would see that we need very much to focus on finding new methods of prevention which are effective.

However, for purposes of this bill, with the limited funds available, and given the fact that we do not know exactly in which direction to move as to prevention, we are only in the research demonstration project phase, we would like to see the majority of the funds used in supportive services where we can see the kind of effect comprehensive services have on the lives of young women and their children which is very positive, indeed.

Mr. Miller asked what kind of program do we need to prevent abortion, to provide an alternative to abortion? Is this legislation realistic? I think we would all concur it is just a beginning. We believe we have to move toward a society where children, both born and unborn, and all human individuals, are very much respected and they are protected.

The question is, if you are going to avoid abortions and the destruction of life, it is how to do this with a limited amount of funds. I think this bill addresses that very, very well. It provides for some prevention and it provides for supportive services.

I believe that is the best we can do at this point, and it would be a very significant beginning.

We urge your consideration of this bill even though it is late in the session, and we pledge to keep working for passage of this legislation now and in the future should it fail to pass this session.

Thank you.

[The prepared statement of Marjory Mecklenburg follows:]

STATEMENT BY MARJORY MECKLENBURG

FOR

SUBCOMMITTEE ON SELECT EDUCATION

ON

"THE ADOLESCENT HEALTH, SERVICES AND

PREGNANCY PREVENTION AND CARE ACT OF 1978, H.R. 12146"

July 24, 1978

Rep. Brademas, members of the Subcommittee on Select Education, I welcome the opportunity to appear before you today as president of American Citizens Concerned for Life, a national pro-life organization, to speak in support of the "Adolescent Health, Services and Pregnancy Prevention and Care Act of 1978," H.R. 12146.

ACCL has had a long-standing interest in pregnant women, children and the family. Our overall purpose is to motivate each individual, and society as a whole, to make decisions about the use of available resources based on the premise that each human being has great value and that individuals should have the opportunity to realize their full potential.

ACCL is an advocate for both public and private sector programs to improve and safeguard the lives of pregnant women and children -- both before and after birth. During the 94th Congress I testified in behalf of bills authored by Sen. Kennedy and Sen. Bayh which focused on these needs. With your permission I would like to enter those statements in the record of this hearing along with testimony I presented last March before the House Select Committee on Population.

The number of adolescent pregnancies and the problems surrounding this phenomenon have been of growing concern to the Administration, members of Congress and the public. About one million adolescent girls -- one in ten aged 15 to 19 -- become pregnant each year, the majority out of wedlock. Of these one million girls, 400,000 are 17 or under; 30,000 are 14 or under. While some teenagers are married and wish to become pregnant, a substantial

number of teenage pregnancies are unwanted; well over 300,000 teenage abortions were reported in 1976 to the Center For Disease Control.¹ Dr. Wendy Baldwin, social demographer from the National Institute of Child Health and Human Development, in her statement before the Senate Human Resources Committee on June 14, reported that for adolescents "birth rates are still high, increasing numbers of births are out-of-wedlock, control of fertility is still poor, and the exposure to risk is increasing."²

H.R. 12146 will make available services which adolescents need to avoid becoming pregnant or to continue a pregnancy already begun, and we support the bill on this basis. We believe that adolescents who choose to continue a pregnancy despite the hardships they encounter are deserving of our compassion and our practical assistance. "Freedom to Choose" implies that it is equally possible for a woman to choose to give birth as well as to abort. Today frightened, confused and dependent adolescents often have little freedom to continue a pregnancy unless the kind of services this bill details are readily available.

Most pregnant adolescents and their babies have a bleak future. The adolescent faces a multitude of psychological, psycho-social and health complications as a result of early pregnancy. These young women have to cope with the developmental tasks of adolescence, while shouldering the demands of early childbearing and rearing. Some of the girls who are pregnant at this early age have multiple problems, such as unstable family backgrounds, and low self-expectation and esteem. Unless the pregnant adolescent receives adequate counseling and services, she may become psychologically impoverished (depression and suicidal attempts), a school dropout, have repeat pregnancies, or become a victim of unemployment and long-term reliance on welfare.^{3,4}

Many girls who are pregnant out of wedlock do not report for medical care until very late in pregnancy. Therefore, a vast majority of them receive inadequate health care and are undernourished. When this is the case, they face significant risks both for themselves and for their babies.

They are more susceptible to death from toxemia of pregnancy (maternal mortality is 60% higher among teenagers who do not receive adequate prenatal care).³ Their children are more frequently premature, and often have such complications as increased susceptibility to infections, hypoxic brain damage, nutrition related congenital defects, and developmental disabilities, including mental retardation and learning disabilities. Infant mortality can be as much as 2.4 times higher for babies born to teenagers than to 20-24 year old mothers.⁴

As we investigated what is being done to assist the adolescents who are facing this crisis, we concluded that a comprehensive approach which provides both medical care and psycho-social support can dramatically improve the outcome for both mother and baby. With adequate medical care, attention to nutrition, and help in psycho-social areas most of these women will deliver safely.

However, the needs of pregnant adolescents are so diverse and complex that a program directed at only improving medical care has proven to be inadequate. Adolescents in general are notably poor users of health care services, and pregnant adolescents in particular are sporadic users of prenatal care. This may be because of ignorance, fear, or negligence. They may have

anxiety about possible ostracism or judgmental attitudes by adults. They often see existing services as not meeting their needs and thus not "approachable."

But when their psycho-social needs are met and adequate counseling and support are available in combination with medical care there is evidence that adolescents will report early for prenatal care and will keep appointments with the physician.

It is important to provide excellent care for this age group in a place that is comfortable for them -- a place in which they may have had a previous positive experience is ideal. For example, when comprehensive care centers are located in schools, the girls tend to come in early for pregnancy care. The teenage grapevine and referrals often inform the pregnant girl where helpful supportive services can be found.

The basic components of successful comprehensive adolescent pregnancy programs are:

1. Early detection of pregnancy and comprehensive prenatal care.
2. Social services to help adolescents cope with emotional, financial and community problems.
3. Comprehensive health care for the infant.
4. Long-term follow-up services for a minimum of two years.
5. Education -- to encourage completion of schooling and provide parenting and family life instruction.
6. Adequate day care.
7. Procedures for involving fathers.

8. Involvement of community supporters.
9. Staff training and education.
10. Transportation resources.
11. Prevention of pregnancy.
12. Evaluation methods to determine success or failure.

Providing comprehensive services to pregnant adolescents appears to be realistic and cost effective over both the long and short term. Girls who utilize comprehensive programs are less likely to have repeat out-of-wedlock pregnancies and they are less likely to rely on welfare assistance programs for long periods of time. Adolescent mothers who receive adequate medical care have a lower rate of obstetrical complications which would affect their health and that of their children.^{5,6}

There is evidence that comprehensive care programs are also an effective means of reducing the number of first pregnancies in the community of adolescents who have contact with such programs. Failing to allocate the resources necessary to provide comprehensive care for pregnant adolescents will result in the need to expend even more to deal with the resulting consequences.

Few pregnant adolescents have access to comprehensive programs. Model programs are available in very few areas. Even where services exist in a community the different elements may be scattered and coordination may be lacking. Young women may not know how to find the assistance they need. Continuity is an important factor in treating adolescents and through this legislation various agencies will be encouraged to seek more coordination and cooperation so that the pregnant adolescent is considered as a whole.

person. We believe that there is a strong case for both more services and better linkage of already existing services.

Because the need for supportive services for pregnant adolescents is urgent and the comprehensive approach has been shown to be effective we would favor increasing the funding authorization in this bill. We would also recommend that the percentage allocated to evaluation be increased. As representatives of the voluntary sector we believe it is crucial that a citizen advisory committee to HEW be formed to recommend guidelines for these programs and to assist in evaluating them. This committee should be broadly representative of the groups that are interested and involved in such programs, and of the people being served by the programs. One of the strengths of this bill is its attempt to involve communities, to allow them flexibility, and to encourage their eventual assumption of responsibility for funding and control. This process will be hastened if a mechanism for ongoing interaction is established between providers and advocates in the field, those being served, and professionals in HEW who are administering the programs.

In addition to authorizing supportive health services and care, H.R. 12146 also provides for pregnancy prevention programs, although it is not clear what percentage of the funds is intended for that purpose. Surely, there is general agreement that prevention is an important aspect of dealing with the problem of adolescent pregnancy. Of the one million adolescents who become pregnant each year abortion statistics would indicate that many did not wish to become pregnant but were not sufficiently educated or motivated to prevent it. Unless we discover effective ways to encourage responsible sexual behavior in the

adolescent population, this situation is unlikely to change in the near future. Dr. Wendy Baldwin reports that "Between 1976 and 1980 we can expect the number of 14-17 year olds to decrease by 6.7%. If the proportion of those who are sexually active continues to increase, however, the net effect may well be an increase in the absolute number of adolescents at risk of pregnancy."²

Surely such a situation is unacceptable. The high degree of sexual freedom that exists in our society today calls for increased personal responsibility and self-control. Yet we have not been able to give young people the kind of help they need to live in such a climate and cope with their own sexuality.

Traditional family planning programs have not provided the kind of approach many young people are seeking. Even where such services are readily available they may not be utilized by sexually active teens.⁷ In addition, the possible adverse effects of long term usage of IUD's and oral contraceptives are a matter of growing concern, as are the other medical problems faced by sexually active teens.⁸

We must develop educational approaches to pregnancy prevention which will focus on sexuality in the broader context of life experiences. It is important to place family planning and human sexuality education in such a context and to structure programs so that they are not isolated technological services devoid of morality, family involvement and other elements that are crucial in an adolescent's life.

I personally don't believe that anything is gained by withholding family planning services from adolescents after they are sexually active. Such a

policy only increases the possibility of pregnancy, pressure for abortions and other problems sexually active adolescents may have. However, accepting adolescents is not the only or optimum solution to preventing adolescent pregnancy. Many of us would like to see programs which would encourage young people to choose to value themselves and their sexuality and to postpone sexual involvement. Yet today there appears to be little emphasis on this approach and little encouragement for adolescents who choose this option. Current role models tend to glamorize the sexually active teen.

It would be our position that the primary prevention funds made available through passage of this bill should be directed at research and development of model programs to foster new and comprehensive approaches to preventing adolescent pregnancy. Contraception programs are substantially funded through other federal legislation.

In summary, we in AGL believe there is a strong case for passage of this bill. The voluntary sector is responding to pregnant adolescents but more comprehensive programs are needed to adequately meet the complex needs of these troubled individuals.

Your recognition of the problems they face and your stimulation of appropriate services will substantially improve the future for many young mothers and their babies.

REFERENCES

1. Califano, Joseph A., Testimony Before the Senate Human Resources Committee, June 14, 1978.
2. Baldwin, Wendy, Testimony Before the Senate Human Resources Committee, June 14, 1978.
3. Youth Alternatives, Vol. IV, No. 11, National Youth Alternatives Project, Washington, D.C., November, 1977.
4. Family Development Program, submitted to HEW Secretary Joseph A. Califano by a Special Task Force, March 17, 1977.
5. Edwards, L. E., An Experimental Comprehensive High School Clinic, unpublished paper, St. Paul, MN, 1977.
6. Hardy, J. B., The John's Hopkins Center for School Aged Mothers and Their Infants, Annual Report 1976-1977, January, 1978.
7. Zelnik, M. and Kantner, J., "Contraceptive Patterns and Premarital Pregnancy Among Women Aged 15-19 in 1976," Family Planning Perspectives, Vol. 10, No. 3, May/June 1978.
8. Kistner, R., speech at Annual Clinical Congress of American College of Surgeons, Reported in OB/GYN NEWS, December 15, 1977.

**STATEMENT OF KAREN MULHAUSER, EXECUTIVE DIRECTOR,
NATIONAL ABORTION RIGHTS ACTION LEAGUE**

Ms. MULHAUSER. My name is Karen Mulhauser, executive director of the National Abortion Rights Action League—NARAL—a national membership organization dedicated to the principle that abortion must remain a legal and accessible alternative for all women, regardless of their age and economic status. In addition, we strongly support and work for efforts to minimize the need for abortion. I appreciate the opportunity to be here today to express NARAL's concerns relative to H.R. 12146, the administration's proposed "Adolescent Health, Services, and Pregnancy Prevention and Care Act of 1978."

As a former junior high science teacher and family planning counselor, I can personally attest to the gravity and tragedy of the situation teenage pregnancy brings into the lives of so many of our young people, as well as the lives of their parents.

It appears to us that H.R. 12146 is exceedingly ambiguous in what its accomplishable goals are and the means by which they would be achieved. The \$60 million budget request for this bill is very small when put against the general purposes of the bill and the comprehensive preventive and prenatal and postpartum services it says could be provided. Furthermore, H.R. 12146 does not mandate any particular services or programs that definitely must be provided under its auspices. So it is not at all clear what would be provided or funded under the administration's proposal as it now stands. In addition, there are no priorities established for what services should be emphasized and what proportion of funding should be allocated to them. This has not been cleared up by either Secretary Califano's written or oral testimony before other congressional committees.

Although a primary goal of H.R. 12146 is purportedly prevention of initial and repeat pregnancies among adolescents, we are struck by the administration's failure to reflect this concern and momentum in the budget requests for the reauthorization of title X—which has been an effective and the major vehicle for provision of preventive medical services and education for teenagers, as well as for adults.

We agree with the Secretary that pregnancy prevention should be the major thrust of this bill, but nowhere in the bill are preventive services clearly defined. The bill simply states that funds may be used "to prevent unwanted initial and repeat pregnancies among adolescents." Nowhere can one find how much of the authorized funds will go for preventive services. Do preventive services include only family planning, or do they also include counseling and sex and family life education? What kinds of family planning services would be funded? How will this program interact with those preventive programs already in existence under title X? For the most cost effectiveness, as well as the greatest benefit to target populations, this new legislation should not duplicate or attempt to replace title X, but should instead address itself to those specific prevention areas not presently covered by title X, such as sex and family life education. Family life and sex education are vitally important as a line of attack in preventing unwanted teenage pregnancies. Without the understanding and sense of responsi-

bility gained from such education, there is little motivation to make responsible decisions about one's sexuality and pregnancy prevention. It is essential that parenting and sex education be directed not only at teenagers but also toward their parents whenever possible. This has been an emphasis from some of those we have heard from today. The family ideally should be the primary source of honest and responsible sex education. However, many times through their own lack of knowledge or awkwardness in dealing with the subject, parents feel threatened and resentful of outside efforts to provide their teenagers with necessary information—even though it is not provided at home.

Experience has shown that no single prevention service or program is ever going to be successful in all cases. There must be a variety of approaches—or personnel—to respond to individuals' different personalities and needs.

This lack of clearly defined priorities presents additional problems when one looks at the area of comprehensive services. This phrase receives frequent mention throughout the bill, but it is never specified what shall actually constitute such services, whether there shall be a core of priority services or whether there would simply be a haphazard arrangement of funding any of the services mentioned in the bill. The problem of differing needs, and therefore different approaches for young adolescents as opposed to older teenagers is not recognized. Nor is the involvement or responsibility of the adolescent male ever addressed. Yet these are terribly important if prevention and other services are to be truly effective.

We believe that comprehensive services are important for adolescents and should include the following:

1. Sex education and contraceptive services;
2. Early pregnancy detection services and referral or counseling for all alternatives—from abortion to adoption, to keeping the child;
3. Prenatal and postpartum health care for those teenagers who decide to continue their pregnancies;
4. Supportive services such as day care, continuing education, and vocational counseling. I would add abortion must be added as a service.

Another area of concern is who would actually be responsible for the coordination and direction of this teenage pregnancy initiative? According to H.R. 12146, it appears that all administrative authority would rest with the HEW Secretary. We would suggest that the most logical place of administration would be the Office of Population Affairs—OPA—which is headed by the Deputy Assistant Secretary for Population Affairs—DAPSA. The DAPSA already has the responsibility under the title X legislation for directing population research and family planning services within the various health agencies. Since the purposes of H.R. 12146 are so closely related, it would be counterproductive to place the responsibility for its administration in another office of HEW. Such an action would, in fact, directly negate the whole concept of linkage.

When Secretary Califano testified before the Senate Human Resources Committee and the House Subcommittee on Public Health and Environment, he eloquently and accurately painted the dismal picture facing most teenagers who become pregnant—to say nothing

ing of the babies born to them. As the Secretary pointed out, teenage pregnancy is "the entry into parenthood of individuals who are often barely beyond childhood themselves." He went on to say:

But for hundreds of thousands of teenagers—particularly the majority who are unmarried—the birth of a child can usher in a dismal future of unemployment, poverty, family breakdown, emotional stress, dependency on public agencies, and health problems for mother and child.

He went on further to speak of "the wrenching disruption of life and education caused by an unwanted pregnancy and its consequences" and referred to this as "a form of bondage for the child-mother and the mother's child." In view of this recognition and the frequent linkage between teenage pregnancies and other pervasive social problems such as poverty, unemployment, lack of education, and family breakdown, it is bitterly ironic that nowhere is there mention of the choice of abortion or access to a full range of alternatives counseling. To be provided with full information about all options available so that the pregnant teenager can make her own choice is the only fair way to deal with a situation which, as even the Secretary has testified, can be totally devastating to her life and future.

Clearly, for over 300,000 teenagers annually—and we hear 370,000 in 1976—abortion has been their only option. Califano orally testified that 90 percent of the life script for a teenage mother was already written for her. How then can one know and speak so compellingly of the dismal fate of these young teenagers and yet ignore, and in many cases deny their right to a future, their right to a choice? This bill, which has so little funding for the goals set forth, including prenatal, delivery, and postpartum care, plus day care and job counseling and education, never mentions nor did Secretary Califano discuss, that very necessary option for some teenagers—abortion. But we would like to work toward minimizing the use of abortion. But there are and will continue to be teenagers who are not reached or who have not used contraception effectively. Punishing them, forcing them to complete an unwanted pregnancy, is not the answer to the problem of teenage pregnancy. And once pregnant, it is too late to talk about prevention.

In conclusion, NARAL finds that H.R. 12146 has tried to be all things to all people by failure to define specific goals, services, priorities, and evaluation mechanisms. The funding for such a wide-ranging bill is grossly inadequate. It is disappointing that Secretary Califano has not actually testified upon the actual content of this bill, but instead more generally upon the problem of teenage pregnancy—the seriousness of which everyone is already convinced. We feel that the bill is far too ambiguous and leaves too many important questions unanswered, including the right of teenagers to receive full counseling of all options. Significant revisions should be made to carefully define the greatest needs in conjunction with realistic goals and a realistic budget.

We would also like to suggest a place for the program within the Department of HEW would appropriately be under the Deputy Assistant Secretary for Population Affairs. The Deputy already has the responsibility under title X legislation for directing family planning services within the various health agencies. Since the purposes of this legislation are so closely related, it would be coun-

terproductive to place the responsibility in another office of HEW.
Such an action would negate the whole concept of linkage.

Thank you.

[The prepared testimony of Karen Mulhauser follows:]

TESTIMONY OF KAREN MULHAUSER, EXECUTIVE DIRECTOR, NATIONAL ABORTION RIGHTS
ACTION LEAGUE BEFORE THE HOUSE SUBCOMMITTEE ON SELECT EDUCATION, JULY 24, 1978
REGARDING H.R. 12146

Mr. Chairman and Members of the Committee:

I am Karen Mulhauser, Executive Director of the National Abortion Rights Action League (NARAL), a national membership organization dedicated to the principle that abortion must remain a legal and accessible alternative for all women, regardless of their age and economic status. In addition, we strongly support and work for efforts to minimize the need for abortion. I appreciate the opportunity to be here today to express NARAL's concerns relative to H.R. 12146; the Administration's proposed "Adolescent Health, Services, and Pregnancy Prevention and Care Act of 1978."

As a former junior high science teacher and family planning counselor, I can personally attest to the gravity and tragedy of the situation teenage pregnancy brings into the lives of so many of our young people, as well as the lives of their parents. Therefore, we commend the Administration for bringing attention to bear upon this sensitive and critical problem of adolescent pregnancy through increased legislative undertakings. However, we must question the wisdom of this particular piece of legislation—H.R. 12146—and the Administration's actual intent and purpose in introducing this bill—which we believe has many serious shortcomings—just one month before all authorizing legislation was to have been reported out of committee.

It appears to us that H.R. 12146 is exceedingly ambiguous in what its accomplishable goals are and the means by which they would be achieved. The \$60 million budget request for this bill is very small when put against the

general purposes of the bill and the "comprehensive" preventive and prenatal and postpartum services it says could be provided. Furthermore, H.R. 12146 does not mandate any particular services or programs that definitely must be provided under its auspices. So it is not at all clear what would be provided, or funded under the Administration's proposal as it now stands. In addition, there are no priorities established for what services should be emphasized and what proportion of funding should be allocated to them. This has not been cleared up by either Secretary Califano's written or oral testimony before other Congressional committees.

Although a primary goal of H.R. 12146 is purportedly prevention of initial and repeat pregnancies among adolescents, we are struck by the Administration's failure to reflect this concern and momentum in its budget requests for the reauthorization of Title X--which has been an effective and the major vehicle for provision of preventive medical services and education for teenagers, as well as for adults. Yet it has been the Congress which has pushed for additional Title X fighting for family planning and other preventive services. Coupled with the vagueness of the Administration's proposal as well as no clear future commitment to this program, we must ask if the Administration's primary interest is in developing an effective means of dealing with adolescent pregnancy or whether it is using this hurried-up proposal to launch a complimentary public relations initiative on a problem in which there is acute public concern.

We agree with the Secretary that pregnancy prevention should be the major thrust of this bill, but nowhere in the bill are preventive services clearly defined. The bill simply states that funds may be used "to prevent unwanted initial and repeat pregnancies among adolescents." Nowhere can one find how much of the authorized funds will go for preventive services. Do preventive services include only family planning, or do they also include counselling and

sex and family life education? What kinds of family planning services would be funded? How will this program interact with those preventive programs already in existence under Title X? For the most cost-effectiveness, as well as the greatest benefit to target populations, this new legislation should not duplicate or attempt to replace Title X but should instead address itself to those specific prevention areas not presently covered by Title X, such as sex and family life education. Family life and sex education are vitally important as a line of attack in preventing unwanted teenage pregnancies. Without the understanding and sense of responsibility gained from such education, there is little motivation to make responsible decisions about ones sexuality and pregnancy prevention. It is essential that "parenting" and "sex education" be directed not only at teenagers but also towards their parents, where possible. The family ideally should be the primary source of sound and responsible sex education. However, many times through their own lack of knowledge or awkwardness in dealing with the subject, parents feel threatened and resentful of outside efforts to provide their teenagers with necessary information—even though it is not requested at home.

Efforts to involve parents in community family life and sex education programs could go far towards providing teenagers better sex education and a better understanding of sexual and parenting responsibilities at home—or at least help some parents understand why they or their teenagers feel awkward dealing with the subject and, therefore, why their adolescents need some information and counselling from outside the home. At the least, those pockets of parental resistance to sex education could be minimized. Increased emphasis should also be placed upon the involvement of the sexually active adolescent male in prevention and sex education programs.

Experience has shown that no single prevention service or program is ever

going to be successful in all cases. There must be a variety of approaches (or personnel) to respond to individuals' different personalities and needs. For example, educational counselling and prevention programs for a 13 year old should be handled differently than they would for an older (16) and more sophisticated teenager. Because of the obvious importance of the family unit, we would strongly recommend inclusion of parent education as an integral part of pregnancy prevention programs.

This lack of clearly defined priorities presents additional problems when one looks at the area of "comprehensive services." This phrase receives frequent mention throughout the bill, but it is never specified what shall actually constitute such services, whether there shall be a core of priority services or whether there would simply be a haphazard arrangement of funding any of the services mentioned in the bill. The problem of differing needs, and therefore different approaches for very young adolescents as opposed to older teenagers is not recognized. Nor is the involvement or responsibility of the adolescent male ever addressed. Yet these are terribly important if prevention and other services are to be truly effective.

We believe that comprehensive services are important for adolescents and should include the following:

1. Sex education and contraceptive services;
2. Early pregnancy detection services and referral or counselling for all alternatives—from abortion to adoption to keeping the child;
3. Prenatal and postpartum health care for those teenagers who decide to continue their pregnancies;
4. Supportive services such as day care, continuing education and vocational counselling.

What is most obvious about these these services is the extremely high cost. The programs outlined here can in no way be accomplished with \$60 million.

technique. Class A agencies were those providing health, education, and social services to adolescents during pregnancy and for a clearly defined period postpartum. Class B agencies provide services in any two of the above categories and Class C agencies offer support in one of these areas only. Within the social services category, infant/child day care was included as a primary service requirement.

The basic data collection method for this survey was an extensive questionnaire followed up in 40 of the 50 communities by a site visit from NACSAP staff or a consultant. Anecdotal information was also obtained during the site visits to augment the standardized questionnaire. The findings of this survey along with the findings of a 13-state school-age parent needs assessment project conducted by NACSAP in 1975 would suggest that the assumption that basic services are already in place for young parents and need only to be linked or coordinated is misleading. While this is sometimes the case in large urban areas, it is an inaccurate reflection of the state-of-the-art in suburban and rural communities. In fact, in rural and suburban communities, the attitudinal issues of adolescent sexuality are just beginning to be dealt with and this process precedes the advent of services. Funds for use by state and local agencies for purposes of coordination will, no doubt, be helpful. Nonetheless, funds for the purpose of coordinating existing services will not supplant the need for services not yet in place.

By way of illustration, all of the agencies that participated in the 1977 NACSAP survey identified infant and child day care as a resource that was critically needed but which was unavailable regardless of the location of the program in an urban or rural area. Other services which the participating agencies viewed as essential but which were largely unavailable as of the spring of 1977 were: 1) group homes and/or

residential care for young women who are unable to remain with their families during the pregnancy; 2) services for adolescent fathers; 3) comprehensive school health/sex education/family life/parenting education courses; 4) decisionmaking training for adolescents; 5) transportation; and 6) long term follow-through support for a minimum of two years following delivery.

With respect to follow-through services, providers have indicated that to effect this dimension of a program, it is essential that staff be available to engage in pro-active outreach with clients or students with whom they have had previous contact in a special program. However, since resources have been limited in terms of responding to young people who are pregnant, minimal attention has been focused on long term follow-through. Yet, it is a central factor as a means of reinforcing the concepts and training afforded by special prenatal programs and it also assures reemphasis of the considerations that influence young people in helping them avoid early, unintended repeat pregnancies.

The services identified above are those which agency staff reported as being needed among service providers participating in the 1977 survey. These services, however, do not by themselves represent the core support which MACSAP recommends as a comprehensive approach for meeting the needs of pregnant adolescents, young parents, and their families. What are these core services? The three key components of a core services approach--each of which is an integral part of any comprehensive strategy--are health, education, and social services. Listed below are the chief elements included in each of these areas. All should be available to pregnant adolescents, young parents and their families during the course of a pregnancy and for a minimum of two years following delivery but will be used by consumers on the basis of individual needs. (NOTE: The costs associated with these services will vary by region, however, on the basis

of information made available by members of our association, it is estimated that a comprehensive approach will cost between \$1,500 and \$2,000 per client per year for the first year of support.)

CORE SERVICES

A. CLIENTS

HEALTH COMPONENT

General age-appropriate adolescent health services (includes dental and eye care)

Pregnancy Testing

Prenatal Care/Preparation for Labor & Delivery

Nutrition Information

Family Planning Counseling and Services

Pediatric Care

EDUCATIONAL COMPONENT

Regular academic school curriculum (A comprehensive parenting/health/sex/ family life education course is included in NACSAP's concept of a regular academic curriculum)

Vocational Training/Job Placement

Consumer Education

Decisionmaking Training

SOCIAL SERVICES COMPONENT

Individual and Group Counseling

These services are intended to introduce all available options to pregnant adolescents regarding disposition of suspected or confirmed pregnancy.

(NOTE: Refers to involvement of adolescent fathers and extended family units.)

Psychological/Psychiatric Services

Developmental Infant/Child Day Care

Legal Services

Group Homes/Residential Care

Transportation

Financial Assistance (Includes reference to AFDC/MEDICAID support)

Adoption Services

8. SERVICE PROVIDERS

Regular in-service and/or pre-service training for administrators and staff associated with programs serving sexually active youth and young parents. (Basic training courses constitute technical assistance that would help staff develop skills in communicating with young parents and their families; apprise administrators of funding sources and regulations; effecting programs; and, suggest means to document efforts, develop linkages, promote public awareness, and develop research designs.)

It is easy to see why comprehensive school-age parent programs are frequently an administrative enigma in view of the range of elements that need to be included in such efforts. However, overlooking any one of these key aspects can result in the breakdown of the service network. Following through on that point, it is important to recognize that H.R. 12146 is a predominantly health oriented bill. As it is now written it overlooks the Core services concept which incorporates health, education, and social services as equal partners in comprehensive program efforts. In fact, without the support from local and state education and social services agencies which has been directed toward this issue for the past several years, it is unlikely we would be here discussing this legislation today. Further, the schools must be looked upon as a central resource for both coordination and direct services to pregnant adolescents and school-age parents. Recognition and respect for the equality of the health, education, and social services partnership at the federal level will, in our opinion, facilitate the cooperation of personnel from all these disciplines at state and local levels and will help achieve successful outcomes for this program. If, however, H.R. 12146 is interpreted and ultimately administered as a predominantly health-based program, our experience would suggest that important contributions and the needed cooperation from associates in the fields of education and social service

will not be affected. This is especially significant when considering which institution has the greatest access to the young people, namely, the school.

I want to also make a point concerning Section 102 of H.R. 12146, specifically item #6 pertaining to the use of grant funds for providing training. The proposed bill excludes support for institutional training or training and assistance provided by consultants. It appears that the idea is to draw upon the expertise of personnel presently associated with existing programs. In identifying core services for a comprehensive school-age parent program you will observe that MACSAP differentiated between the needs of clients and those who are working directly with young people. In-service training has been one type of technical assistance which MACSAP has offered in its program over the past few years. Often through specialized training courses and at other times through national conferences or individual consultant services. For example, to date, MACSAP has helped to develop and conduct state and regional in-service training courses in Oregon, Washington, Maryland, Louisiana, Texas, West Virginia, Illinois, Colorado, and Pennsylvania. In the case of Colorado and Pennsylvania, our representatives were participating as staff in regional programs developed by the Department of Health, Education, and Welfare. The course content was generally designed to help professionals and others who are working with sexually active youth and young parents reach an understanding about their own values and perceptions of self, sexuality, and parenting so that they can relate more effectively to young people and their families. In some instances the courses offered have been accredited by higher education institutions (e.g., University of Oregon, University of Texas/Galveston, and Eastern Washington State College at Cheney). Instructors in these courses have, in some cases, been independent consultants selected on the basis of their relevant expertise.

On the basis of its experience with these training programs, NACSAP recommends that a waiver clause be added to Item 6 to allow the use of funds for training by institutions and/or consultants pending review of the grantee's training methodology and faculty.

Item #6-3 of Section 102 (Uses of Grants) imposes another restriction limiting any grantee from using in excess of 50% of its grant for services. Though a waiver is allowed, on the basis of the case made earlier about the lack of services in several communities, especially in suburban and rural areas, NACSAP strongly recommends that this restriction be revised to permit a grantee to use up to 75% of a grant for direct services.

NACSAP proposes two recommendations relevant to Section 104 of H. R. 12146 (Requirements for Grant Approval). First of all, a maintenance of effort clause needs to be added. In effect, this would be an insurance premium to guard against the possible redirection or withdrawal of existing state, local, and/or private funds that were previously generated to meet the needs of this population. This recommendation is made on the basis of a fundamental understanding and appreciation for the sensitive nature of adolescent parent programs and in recognition of the fact that in the context of other human service concerns, this is yet a relatively low priority in most communities.

The second consideration is with reference to Item #6 in Section 104. As written, this Item requires grantees to describe how adolescents needing services other than those provided directly by the grantees will be identified and how access and referral to those services will be achieved. Included in the services described as "other" is infant, day and drop-in care services for adolescent parents. Infant day care cannot be viewed as a luxury service for adolescent parents. It has been proven among our

constituents to be central to the concept of comprehensive services. Without it, the efforts to provide coordinated prenatal services are destined to a short-term impact, an impact which, for all practical purposes, terminates at the point when the adolescent mother who has delivered her baby and has kept the child (approximately 90% of the over 600,000 adolescents who carry pregnancies to term are estimated to be keeping their babies rather than placing them for adoption) attempts to return to school and finds there is no one to care for the baby when she returns to classes. As a central element in the core services program, developmental infant day care is difficult and costly to provide. However, some states, e.g., California, and local communities, can demonstrate that this is not an impossible resource to provide. NACSAP recommends, therefore, that infant/child day care be deleted from Item #6 (where it is referred to as other) and, inserted in Item #5 (Section 104) which includes a listing of core services.

Title II of H.R. 12146 (Improving Coordination of Federal and State Program) notes that the Secretary of DHEW will set aside up to 1% of the funds in this program for evaluation. From NACSAP's perspective this would appear to be an extremely limited allocation for an especially important aspect of comprehensive programs. The knowledge base concerning these programs is limited and predicated on the results of very few intervention strategies. NACSAP recommends that a minimum of 3% and a maximum of 5% of the funds be set aside for evaluation. Further, in the regulations, a definition of the evaluation design and the means for monitoring the evaluation components of the programs funded should be provided with appropriate means of adaptation to health, education, and/or social service-based approaches. All grantees should be required to incorporate an evaluation component in proposals for funding before qualifying for competition.

There are several references to technical assistance in H.R. 12146 which NACSAF believes to be a pivotal point in terms of the potential for success of the program in general and specifically in terms of the outcomes for individual grantees. Technical assistance plans must be developed for use by federal, state, and local agencies that are working in this field. At a minimum, the technical assistance associated with the program resulting from this legislation should make available to interested persons the following:

- 1) guidelines for needs assessment at state and local levels;
- 2) recommended procedures for developing and/or coordinating core services;
- 3) identification of research and evaluation techniques appropriate to various program designs; and,
- 4) suggested formats for documenting efforts on short and long-term bases.

In the work that NACSAF has been involved in in nearly 40 states over the past several years and through the network of programs with which the organization is associated, this is an area which we know to be vitally needed for getting a program started and then sustaining it. Without technical assistance resources such as those described, it will be difficult for H.R. 12146 to be effected successfully. NACSAF would hope to make a meaningful contribution to this part of the program.

In summary I would like to affirm once again NACSAF's general support for H.R. 12146. I would further emphasize and underscore, however, the need to strengthen this measure along the lines suggested so that a new program, were it to get underway, would not detract from or encumber the steps which have already been taken to prevent adolescent pregnancies and/or to treat the needs of families involved in such a circumstance. This bill places considerable responsibility in the hands of those who

develop the regulations and subsequently chart the administrative course. Because of the complexity of such an effort as it relates to pregnant adolescents and young parents, which I hope has been characterized in my testimony, NACSA's final recommendation is that DHEW be required to develop regulations and conduct this program in concert with an Advisory Committee comprised of persons with expertise in the provision of services; research and evaluation; and/or policymaking with respect to this population. Consumers should also be represented on this Committee. Without such a Committee, a Committee that could also relate to the other elements of the Teenage Pregnancy Initiative, it will be extremely difficult to implement this program. Personally, I am skeptical that the breadth and depth of expertise that is needed in such a comprehensive effort is in place at the Department of Health, Education, and Welfare at the present time.

Mr. Chairman, I am pleased to have had the opportunity to join the other witnesses in appearing before you today on behalf of young people who are at risk of pregnancy as well as on behalf of adolescent parents and their families. It would appear that H.R. 12146 has its greatest potential, if focused, as a beginning effort to address the needs of pregnant adolescents and young parents. NACSA looks forward to working with you and other members of Congress and the Administration in promoting a comprehensive, cost-effective strategy which results in a successful, compassionate, and much needed program which cannot conscientiously be delayed. Thank you for the opportunity to testify.

attachment: NACSA MEMBERSHIP BROCHURE

The Issue
Adolescent
Pregnancy
&
Parenthood

- Pregnancy among 10 to 14 year olds has almost doubled since 1957. There were 6,960 births to women 10 to 14 in that year. In 1975 there were 12,642 births to women in that age group.
- While birth rates for 18-19 year olds are declining, pregnancy among 15-17 year olds is increasing. Births to younger teens—15-17 year olds—increased by 21.7 percent between 1966 and 1975.
- Births to single mothers 15-19 increased by 63.8 percent from 1966 to 1975.
- More women 14 and younger had abortions than delivered children in 1975. The typical woman receiving an abortion in 1975 was young, white and unmarried.
- Racial differences among single parents are narrowing. In 1969 the birth rate for single black women 15-17 was about 11 times higher than the rate for single white women. By 1975 the differential was reduced to 8.

Sources: National Center for Human Resources Planning, 1981
Center for Disease Control, Atlanta, GA

The Organization
NACSAP

- NACSAP is the only national, multi-disciplinary membership organization concerned specifically with the resolution of the problems of adolescent parenthood.
- NACSAP specializes in technical assistance including publications, in-service training, conferences, program consultation and advocacy.
- NACSAP has members in nearly all of the states and affiliates in California, Florida, Louisiana, Michigan, Ohio, Oregon, Texas, Washington and Wisconsin. We are funded through membership dues, private contributions (which are tax-deductible) and government contracts.

NACSAP MEMBERSHIP APPLICATION

I want to meet the challenge of action by joining NACSAP. My check or money order, made payable to NACSAP, is enclosed. Dues and contributions are forwarded to me and include NACSAP and state affiliate membership where applicable.

Please complete the following:

- | | | |
|-------------------------------------|--|--|
| <input type="checkbox"/> NEW MEMBER | <input type="checkbox"/> Young Parent | <input type="checkbox"/> \$50 Sustaining |
| <input type="checkbox"/> RENEWAL | <input type="checkbox"/> \$20 Individual | <input type="checkbox"/> \$100 Patron |
| | <input type="checkbox"/> \$30 Family | <input type="checkbox"/> More than \$100 |

Mr./Ms./Mrs./Mx.

Title

Address

Address

City

State

Telephone Area Code

- ☐ I would like to attend NACSAP membership in my community. Please send me membership applications to distribute in my area.
- ☐ Please send me additional information about the activities of my local affiliate. This applies to those in Calif., Florida, Louisiana, Michigan, Ohio, Oregon, Texas, Washington and Wisconsin.

Please return this form to: NACSAP, 7315 Wisconsin Avenue, #211-W, Washington, D.C. 20014. Telephone: (301) 654-2336.

Ms. FORBUSH. In the first place, we have heard to some extent this morning about the inadequacy of a \$60 million new piece of legislation to address the needs of those youngsters who are already pregnant, young parents as well as those who are sexually active.

National Alliance Concerned with School-Aged Parents is in agreement that this \$60 million package is, indeed, much too limited. However, if the bill can be developed so that is, indeed, focused, we would recommend that it be focused on the needs of youngsters who already are pregnant or are young parents.

We feel that this could have a measurable impact on the developing program efforts and those that are already in place in several communities throughout the country. We would, however, go on to reiterate and emphasize the need for a maintenance of effort clause that needs to be incorporated so that efforts that have already been started will in no way be jeopardized.

Efforts at the community level and to some extent at State levels are only now just beginning. And this is not yet a popular issue. We feel several communities have made remarkable efforts, some we have heard about today. But there are several other communities we have not heard from on precisely those just beginning to do something for pregnant adolescents and young parents.

I am going to read a very brief letter our organization received shortly after we had completed a survey of 50 programs for school-aged parents which was conducted in 1977 with funds provided by the Joseph P. Kennedy, Jr., Foundation, and I read:

"DEAR FRIENDS OF NACSAP, I am afraid the information I have given you is quite incomplete, for several reasons—

And I should add this has come to us from the Office of Social Concerns in Rapid City, S. Dak.

We are a small, new agency. However, our workers travel 1,000 miles a week to cover the wide range of desolate country to be of service to the outlying areas. Rapid City and Ellsworth Air Force Base do allow the pregnant girls to complete their education. However, many of the small rural towns do not.

Either the girls drop out for the semester or occasionally they will allow them to do their studies at home. This is one reason why we often bring girls to Rapid City for foster care during their pregnancy, so they can go to school.

I hope this information has been helpful. Sincerely—

And it is signed by the social worker in the program.

I add that only to try to highlight the fact that there are several communities without services in place and obviously are looking outside their own immediate areas for support to respond to the needs of pregnant adolescents, young parents and their families.

In the study that we did complete for the Kennedy Foundation last year, we found that a range of 2 to 15 percent of the population in need was presently being served.

We would, however, feel that in the interest of devoting some of the moneys allowed for H.R. 12146, that we would be supportive of allowing perhaps 25 to 35 percent of this money to be directed toward primary and prevention efforts that are demonstration-type projects in nature. We feel this then would allow us to build and develop the base of information which based on previous testimony this morning we can conclude might not be available to the extent that it is needed.

On another point that I would speak to, in section 102 of H.R. 12146, as the bill is presently written, there is a restriction with regard to the use of training funds. Precisely, the restriction is that agencies that would receive funds under this program would not be allowed to use consultants or institutions to support inservice training for people working with sexually active youth and young parents in the existing programs.

The National Alliance Concerned With School-Aged Parents has worked over the last 10 years in providing technical assistance to local, State, and national organizations interested in this issue. One of the types of technical assistance that we have provided includes inservice and preservice training to people who are concerned about the need to improve their own skills and relating to sexually active youth and young parents.

We have found that it has been inordinately helpful to involve consultants who are experts in their field, and also align ourselves with institutions of higher learning to conduct these training programs.

Therefore, we recommend a waiver be incorporated into the language of the bill to allow a grantee to use consultants or to align themselves with institutions based on the provision of a methodology in course background, and also the name of the consultants they would plan to choose.

This needs to be emphasized greatly, the need for an improved and expanded apportionment of funds for evaluation. To a great extent, the information that we have available from school-age-parent programs which have been in existence over the 5 to 10 years is sketchy. The data are not uniform which are collected in the various programs. Precisely, it is very difficult to obtain accurate information about the cost of providing services. You will note that in the testimony already provided here today there is a great range in terms of the budget, the number of people served in programs, and also the outcomes, not only for the clients, the young parents, their extended families, and the babies, but also what are the outcomes as measured against the objectives of the program. We recommend 3 percent be directed toward evaluation, and a maximum of 5 percent.

On page 8 of the written testimony, there is a listing of the core services which we feel are important to provide and have learned through our contact with over 1,500 programs throughout the country. We have found these services are indeed essential. With reference to the list of services which have been written into the proposed legislation, we find a couple of the services are not identified nor emphasized to the extent necessary. One is pregnancy testing, another infant day care. We have learned this morning of the importance of day care as a means of helping young women to remain in school. You do come to a state where there is legislation in place to allow school systems to establish day-care settings on high school campuses.

We also feel strongly as to comprehensive planning, sex family life, and planning and this is an ingredient in many school curricula that is just being developed.

Last, we feel strongly as to the need for followthrough. We have learned in some programs they are able to provide some support

services for as long as 12 to 16 weeks after delivery. The models we have heard from this morning, the Johns Hopkins and Park program in Grand Rapids are, perhaps exceptions in terms of follow-through support. This needs to be developed to make sure the long-term benefits are felt by the young people in the years to come.

I move to a point emphasized heavily this morning by Dr. Richmond, that is, technical assistance. Clearly, the only one working in this program for a long time, we know the need is great. It is needed at local, State, and national levels. It ranges from making sure there is information about other programs made available to those just starting, as well as making available resources for service providers working with pregnant adolescents and young parents.

Another element is the need for support to State agencies which are just now beginning to coordinate their efforts but heretofore have not talked with one another as to the human-interest strategy. One of the needs we have, and this comes through every daily mailbag, is the need from State agencies. They are writing and asking how can we help such-and-such a program in a community to get started. We feel this is important. Similarly, policy coordination for State agencies and also those who are just beginning to respond to the need of adolescents.

I move to now the suggestion of establishing an advisory committee in making sure this program has maximum impact. There have been several questions raised in recent months since this initiative has been developed as to where the office would be housed in HEW. We heard a recommendation this morning from the Child Welfare Agency that the office should be housed in the Office of Human Development Services at HEW. There are others who feel it would benefit by being under the aegis of Dr. Richmond and his staff.

A last point that I would make is in reference to the cost estimates we have heard this morning, from \$750 a year to provide services, to \$2,000 a year. Much work needs to be done as this legislation moves forward to substantiate the cost figures being reported here.

Based on the contacts we have with our agencies and on the basis of the fact I have seen approximately 100 adolescent parent programs throughout this country, I think it is important that we help people pull out the information which will be useful in estimating how much it will cost in providing service to school-age parents and their families.

Thank you.

Mr. MILLER. Thank you.

STATEMENT OF MARJORY MECKLENBURG, PRESIDENT, AMERICAN CITIZENS CONCERNED FOR LIFE

Ms. MECKLENBURG. I am Marjory Mecklenburg. I am pleased to have this opportunity to testify in behalf of this bill. ACCL is a national pro-life organization founded during the last Congress. At that time we pledged in testimony before the Senate that we would work in partnership with the administration, Congress, and representatives of the private sector to insure that children both born and unborn were protected and cared about and that the opportu-

nities for achieving potential would become greater and that pregnant women and families have the services needed to bear and rear children with dignity and safety. This charge has given us a broad pro-life focus.

We have had an opportunity to work with coalitions including a wide variety of groups and it has given us an interest in a number of pieces of legislation.

The recommendations of the select committee consistently make a great difference in the quality of the lives of many people, especially young people, and we appreciate the work that you do.

The bill before us today is one which is needed to help pregnant adolescents and their children. We are pleased you are giving it your attention.

You have heard the various dimensions of the problems that pregnant adolescents and their children face, and also the potential for changing this dismal outcome with comprehensive services. We see many strengths in this bill and recommend its passage, but we would like to make several brief recommendations.

First, since it appears comprehensive programs are cost-effective and the need is so great, we recommend the money allocated be increased over the next 3 years. I sense a consensus here that the money is really not adequate to the task, and we would ask that it be increased.

We also see evaluation as a crucial element in monitoring and planning future programs and favor increasing the amount for evaluation.

Third, since this bill encourages cooperative effort between HEW and jurisdictions, we suggest they work with HEW in evaluating guidelines.

Fourth, we believe provision of abortion services should not be added to this bill.

It is rather exciting to me that groups of different opinions and policies on abortion can work together on legislation such as this to help women who choose to continue a pregnancy and to also be sure that adequate preventive services are available.

I think if abortion is not added to this bill, we can and have formed a broad coalition which can make significant progress in helping to eliminate the problems which lead to abortion and lead to a destructive pattern of life which you have heard about women who face special problems. I think the passage of this bill is too important to make it a battleground over abortion. That is why I am pleased to know the different pro-abortion groups are here. We hope it will usher in a new era in finding ways of preventing the problem and handling the problem once it has occurred.

Next, we favor using whatever portions of the funds in this bill are used for prevention, to be used for research, initiation and evaluation of educational programs in areas such as family life, preparation for parenthood and value-oriented sex education programs.

I would agree with Denese Shipp in her earlier testimony when she pointed out that contraceptive services, biological sex programs are very important, but there is a third facet, that of building human relationships, motivation, relationships with young men,

this kind of facet which is built into a prevention program which works.

We have quite adequate contraceptive funding through other pieces of legislation, at least significant, maybe I should say that. We need now to focus on how we are going to involve educational programs to provide the motivation to use these contraceptive services or to defer sexual activity, to raise the level of self-esteem of these young people to get them to value their own sexuality and to deal with the responsibilities which go with parenthood.

As some have pointed out, we do not know how to provide in this area. Mr. Kildee asked for hard data on sex information and the effect it can have on pregnancy. We have heard contraceptive education may possibly increase sexual activity, particularly if the contraceptives are not used with a continuing kind of motivation and support around the young people using them, if they are used sporadically, and in fact, they have failure and they may end up pregnant.

So, we would see that we need very much to focus on finding new methods of prevention which are effective.

However, for purposes of this bill, with the limited funds available, and given the fact that we do not know exactly in which direction to move as to prevention, we are only in the research demonstration project phase, we would like to see the majority of the funds used in supportive services where we can see the kind of effect comprehensive services have on the lives of young women and their children which is very positive, indeed.

Mr. Miller asked what kind of program do we need to prevent abortion, to provide an alternative to abortion? Is this legislation realistic? I think we would all concur it is just a beginning. We believe we have to move toward a society where children, both born and unborn, and all human individuals, are very much respected and they are protected.

The question is, if you are going to avoid abortions and the destruction of life, it is how to do this with a limited amount of funds. I think this bill addresses that very, very well. It provides for some prevention and it provides for supportive services.

I believe that is the best we can do at this point, and it would be a very significant beginning.

We urge your consideration of this bill even though it is late in the session, and we pledge to keep working for passage of this legislation now and in the future should it fail to pass this session.

Thank you.

[The prepared statement of Marjory Mecklenburg follows:]

STATEMENT BY MARJORY MECKLENBURG

FOR

SUBCOMMITTEE ON SELECT EDUCATION

ON

"THE ADOLESCENT HEALTH, SERVICES AND
PREGNANCY PREVENTION AND CARE ACT OF 1978, H.R. 12146"

July 24, 1978

Rep. Brademas, members of the Subcommittee on Select Education, I welcome the opportunity to appear before you today as president of American Citizens Concerned for Life, a national pro-life organization, to speak in support of the "Adolescent Health, Services and Pregnancy Prevention and Care Act of 1978," H.R. 12146.

ACCL has had a long-standing interest in pregnant women, children and the family. Our overall purpose is to motivate each individual, and society as a whole, to make decisions about the use of available resources based on the premise that each human being has great value and that individuals should have the opportunity to realize their full potential.

ACCL is an advocate for both public and private sector programs to improve and safeguard the lives of pregnant women and children -- both before and after birth. During the 94th Congress I testified in behalf of bills authored by Sen. Kennedy and Sen. Bayh which focused on these needs. With your permission I would like to enter those statements in the record of this hearing along with testimony I presented last March before the House Select Committee on Population.

The number of adolescent pregnancies and the problems surrounding this phenomenon have been of growing concern to the Administration, members of Congress and the public. About one million adolescent girls -- one in ten aged 15 to 19 -- become pregnant each year, the majority out of wedlock. Of these one million girls, 400,000 are 17 or under; 30,000 are 14 or under. While some teenagers are married and wish to become pregnant, a substantial

number of teenage pregnancies are unwanted; well over 300,000 teenage abortions were reported in 1976 to the Center For Disease Control.¹ Dr. Wendy Baldwin, social demographer from the National Institute of Child Health and Human Development, in her statement before the Senate Human Resources Committee on June 14, reported that for adolescents "birth rates are still high, increasing numbers of births are out-of-wedlock, control of fertility is still poor, and the exposure to risk is increasing."²

H.R. 12146 will make available services which adolescents need to avoid becoming pregnant or to continue a pregnancy already begun, and we support the bill on this basis. We believe that adolescents who choose to continue a pregnancy despite the hardships they encounter are deserving of our compassion and our practical assistance. "Freedom to Choose" implies that it is equally possible for a woman to choose to give birth as well as to abort. Today frightened, confused and dependent adolescents often have little freedom to continue a pregnancy unless the kind of services this bill details are readily available.

Most pregnant adolescents and their babies have a bleak future. The adolescent faces a multitude of psychological, psycho-social and health complications as a result of early pregnancy. These young women have to cope with the developmental tasks of adolescence while shouldering the demands of early childbearing and rearing. Some of the girls who are pregnant at this early age have multiple problems, such as unstable family backgrounds, and low self-expectation and esteem. Unless the pregnant adolescent receives adequate counseling and services she may become psychologically impoverished (depression and suicidal attempts), a school dropout, have repeat pregnancies, or become a victim of unemployment and long-term reliance on welfare.^{3,4}

Many girls who are pregnant out of wedlock do not report for medical care until very late in pregnancy. Therefore, a vast majority of them receive inadequate health care and are undernourished. When this is the case, they face significant risks both for themselves and for their babies.

They are more susceptible to death from toxemia of pregnancy (maternal mortality is 60% higher among teenagers who do not receive adequate prenatal care).³ Their children are more frequently premature, and often have such complications as increased susceptibility to infections, hypoxic brain damage, nutrition related congenital defects, and developmental disabilities, including mental retardation and learning disabilities. Infant mortality can be as much as 2.4 times higher for babies born to teenagers than to 20-24 year old mothers.⁴

When we investigated what is being done to assist the adolescents who are facing this crisis, we concluded that a comprehensive approach which provides both medical care and psycho-social support can dramatically improve the outcome for both mother and baby. With adequate medical care, attention to nutrition, and help in psycho-social areas most of these women will deliver safely.

However, the needs of pregnant adolescents are so diverse and complex that a program directed at only improving medical care has proven to be inadequate. Adolescents in general are notably poor users of health care services, and pregnant adolescents in particular are sporadic users of prenatal care. This may be because of ignorance, fear, or negligence. They may have

anxiety about possible ostracism or judgmental attitudes by adults. They often see existing services as not meeting their needs and thus not "approachable."

But when their psycho-social needs are met and adequate counseling and support are available in combination with medical care, there is evidence that adolescents will report early for prenatal care and will keep appointments with the physician.

It is important to provide excellent care for this age group in a place that is comfortable for them -- a place in which they may have had a previous positive experience is ideal. For example, when comprehensive care centers are located in schools, the girls tend to come in early for pregnancy care. The teenage grapevine and referrals often inform the pregnant girl where helpful supportive services can be found.

The basic components of successful comprehensive adolescent pregnancy programs are:

1. Early detection of pregnancy and comprehensive prenatal care.
2. Social services to help adolescents cope with emotional, financial and community problems.
3. Comprehensive health care for the infant.
4. Long-term follow-up services for a minimum of two years.
5. Education -- to encourage completion of schooling and provide parenting and family life instruction.
6. Adequate day care.
7. Procedures for involving fathers.

8. Involvement of community supporters.
9. Staff training and education.
10. Transportation resources.
11. Prevention of pregnancy.
12. Evaluation methods to determine success or failure.

Providing comprehensive services to pregnant adolescents appears to be realistic and cost effective over both the long and short term. Girls who utilize comprehensive programs are less likely to have repeat out-of-wedlock pregnancies and they are less likely to rely on welfare assistance programs for long periods of time. Adolescent mothers who receive adequate medical care have a lower rate of obstetrical complications which would affect their health and that of their children.^{5,6}

There is evidence that comprehensive care programs are also an effective means of reducing the number of first pregnancies in the community of adolescents who have contact with such programs. Failing to allocate the resources necessary to provide comprehensive care for pregnant adolescents will result in the need to expend even more to deal with the resulting consequences.

Few pregnant adolescents have access to comprehensive programs. Model programs are available in very few areas. Even where services exist in a community the different elements may be scattered and coordination may be lacking. Young women may not know how to find the assistance they need. Continuity is an important factor in treating adolescents and through this legislation various agencies will be encouraged to seek more coordination and cooperation so that the pregnant adolescent is considered as a whole

person. We believe that there is a strong case for both more services and better linkage of already existing services.

Because the need for supportive services for pregnant adolescents is urgent and the comprehensive approach has been shown to be effective we would favor increasing the funding authorization in this bill. We would also recommend that the percentage allocated to evaluation be increased. As representatives of the voluntary sector we believe it is crucial that a citizen advisory committee to HEW be formed to recommend guidelines for these programs and to assist in evaluating them. This committee should be broadly representative of the groups that are interested and involved in such programs, and of the people being served by the programs. One of the strengths of this bill is its attempt to involve communities, to allow them flexibility, and to encourage their eventual assumption of responsibility for funding and control. This process will be hastened if a mechanism for ongoing interaction is established between providers and advocates in the field, those being served, and professionals in HEW who are administering the programs.

In addition to authorizing supportive health services and care, H.R. 12146 also provides for pregnancy prevention programs, although it is not clear what percentage of the funds is intended for that purpose. Surely, there is general agreement that prevention is an important aspect of dealing with the problem of adolescent pregnancy. Of the one million adolescents who become pregnant each year abortion statistics would indicate that many did not wish to become pregnant but were not sufficiently educated or motivated to prevent it. Unless we discover effective ways to encourage responsible sexual behavior in the

adolescent population, this situation is unlikely to change in the near future. Dr. Wendy Baldwin reports that "Between 1976 and 1980 we can expect the number of 14-17 year olds to decrease by 6.7%. If the proportion of those who are sexually active continues to increase, however, the net effect may well be an increase in the absolute number of adolescents at risk of pregnancy."²

Surely such a situation is unacceptable. The high degree of sexual freedom that exists in our society today calls for increased personal responsibility and self-control. Yet we have not been able to give young people the kind of help they need to live in such a climate and cope with their own sexuality.

Traditional family planning programs have not provided the kind of approach many young people are seeking. Even where such services are readily available they may not be utilized by sexually active teens.⁷ In addition, the possible adverse effects of long term usage of IUD's and oral contraceptives are a matter of growing concern, as are the other medical problems faced by sexually active teens.⁸

We must develop educational approaches to pregnancy prevention which will focus on sexuality in the broader context of life experiences. It is important to place family planning and human sexuality education in such a context and to structure programs so that they are not isolated technological services devoid of morality, family involvement and other elements that are crucial in an adolescent's life.

I personally don't believe that anything is gained by withholding family planning services from adolescents after they are sexually active. Such a

policy only increases the possibility of pregnancy. Pressure for abortions and other problems sexually active adolescents may have. However, contracepting adolescents is not the only or optimum solution to preventing adolescent pregnancy. Many of us would like to see programs which would encourage young people to choose to value themselves and their sexuality and to postpone sexual involvement. Yet today there appears to be little emphasis on this approach and little encouragement for adolescents who choose this option. Current role models tend to glamorize the sexually active teen.

It would be our position that the Primary Prevention funds made available through passage of this bill should be directed at research and development of model programs to foster new and comprehensive approaches to preventing adolescent pregnancy. Contraception programs are substantially funded through other federal legislation.

In summary, we in ACCL believe there is a strong case for passage of this bill. The voluntary sector is responding to pregnant adolescents but more comprehensive programs are needed to adequately meet the complex needs of these troubled individuals.

Your recognition of the problems they face and your stimulation of appropriate services will substantially improve the future for many young mothers and their babies.

REFERENCES

1. Califano, Joseph A., Testimony Before the Senate Human Resources Committee, June 14, 1978.
2. Baldwin, Wendy, Testimony Before the Senate Human Resources Committee, June 14, 1978.
3. Youth Alternatives, Vol. IV, No. 11, National Youth Alternatives Project, Washington, D.C., November, 1977.
4. Family Development Program, submitted to HEW Secretary Joseph A. Califano by a Special Task Force, March 17, 1977.
5. Edwards, L. E., An Experimental Comprehensive High School Clinic, unpublished paper, St. Paul, MN, 1977.
6. Hardy, J. B., The John's Hopkins Center for School Aged Mothers and Their Infants, Annual Report 1976-1977, January, 1978.
7. Zelnik, M., and Kantner, J., "Contraceptive Patterns and Premarital Pregnancy Among Women Aged 15-19 in 1976," Family Planning Perspectives, Vol. 10, No. 3, May/June 1978.
8. Kistner, R., speech at Annual Clinical Congress of American College of Surgeons, reported in OB/GYN NEWS, December 15, 1977.

**STATEMENT OF KAREN MULHAUSER, EXECUTIVE DIRECTOR,
NATIONAL ABORTION RIGHTS ACTION LEAGUE**

Ms. MULHAUSER. My name is Karen Mulhauser, executive director of the National Abortion Rights Action League—NARAL—a national membership organization dedicated to the principle that abortion must remain a legal and accessible alternative for all women, regardless of their age and economic status. In addition, we strongly support and work for efforts to minimize the need for abortion. I appreciate the opportunity to be here today to express NARAL's concerns relative to H.R. 12146, the administration's proposed "Adolescent Health, Services, and Pregnancy Prevention and Care Act of 1978."

As a former junior high science teacher and family planning counselor, I can personally attest to the gravity and tragedy of the situation teenage pregnancy brings into the lives of so many of our young people, as well as the lives of their parents.

It appears to us that H.R. 12146 is exceedingly ambiguous in what its accomplishable goals are and the means by which they would be achieved. The \$60 million budget request for this bill is very small when put against the general purposes of the bill and the comprehensive preventive and prenatal and postpartum services it says could be provided. Furthermore, H.R. 12146 does not mandate any particular services or programs that definitely must be provided under its auspices. So it is not at all clear what would be provided or funded under the administration's proposal as it now stands. In addition, there are no priorities established for what services should be emphasized and what proportion of funding should be allocated to them. This has not been cleared up by either Secretary Califano's written or oral testimony before other congressional committees.

Although a primary goal of H.R. 12146 is purportedly prevention of initial and repeat pregnancies among adolescents, we are struck by the administration's failure to reflect this concern and momentum in the budget requests for the reauthorization of title X—which has been an effective and the major vehicle for provision of preventive medical services and education for teenagers, as well as for adults.

We agree with the Secretary that pregnancy prevention should be the major thrust of this bill, but nowhere in the bill are preventive services clearly defined. The bill simply states that funds may be used "to prevent unwanted initial and repeat pregnancies among adolescents." Nowhere can one find how much of the authorized funds will go for preventive services. Do preventive services include only family planning, or do they also include counseling and sex and family life education. What kinds of family planning services would be funded? How will this program interact with those preventive programs already in existence under title X? For the most cost-effectiveness, as well as the greatest benefit to target populations, this new legislation should not duplicate or attempt to replace title X, but should instead address itself to those specific prevention areas not presently covered by title X, such as sex and family life education. Family life and sex education are vitally important as a line of attack in preventing unwanted teenage pregnancies. Without the understanding and sense of responsi-

bility gained from such education, there is little motivation to make responsible decisions about one's sexuality and pregnancy prevention. It is essential that parenting and sex education be directed not only at teenagers but also toward their parents whenever possible. This has been an emphasis from some of those we have heard from today. The family ideally should be the primary source of honest and responsible sex education. However, many times through their own lack of knowledge or awkwardness in dealing with the subject, parents feel threatened and resentful of outside efforts to provide their teenagers with necessary information—even though it is not provided at home.

Experience has shown that no single prevention service or program is ever going to be successful in all cases. There must be a variety of approaches—or personnel—to respond to individuals' different personalities and needs.

This lack of clearly defined priorities presents additional problems when one looks at the area of comprehensive services. This phrase receives frequent mention throughout the bill, but it is never specified what shall actually constitute such services, whether there shall be a core of priority services or whether there would simply be a haphazard arrangement of funding any of the services mentioned in the bill. The problem of differing needs, and therefore different approaches for young adolescents as opposed to older teenagers is not recognized. Nor is the involvement or responsibility of the adolescent male ever addressed. Yet these are terribly important if prevention and other services are to be truly effective.

We believe that comprehensive services are important for adolescents and should include the following:

1. Sex education and contraceptive services;
2. Early pregnancy detection services and referral or counseling for all alternatives—from abortion to adoption, to keeping the child;
3. Prenatal and postpartum health care for those teenagers who decide to continue their pregnancies;
4. Supportive services such as day care, continuing education, and vocational counseling. I would add abortion must be added as a service.

Another area of concern is who would actually be responsible for the coordination and direction of this teenage pregnancy initiative? According to H.R. 12146, it appears that all administrative authority would rest with the HEW Secretary. We would suggest that the most logical place of administration would be the Office of Population Affairs—OPA—which is headed by the Deputy Assistant Secretary for Population Affairs—DAPSA. The DAPSA already has the responsibility under the title X legislation for directing population research and family planning services within the various health agencies. Since the purposes of H.R. 12146 are so closely related, it would be counterproductive to place the responsibility for its administration in another office of HEW. Such an action would, in fact, directly negate the whole concept of linkage.

When Secretary Califano testified before the Senate Human Resources Committee and the House Subcommittee on Public Health and Environment, he eloquently and accurately painted the dismal picture facing most teenagers who become pregnant—to say nothing

ing of the babies born to them. As the Secretary pointed out, teenage pregnancy is "the entry into parenthood of individuals who are often barely beyond childhood themselves." He went on to say.

But for hundreds of thousands of teenagers—particularly the majority who are unmarried—the birth of a child can usher in a dismal future of unemployment, poverty, family breakdown, emotional stress, dependency on public agencies, and health problems for mother and child.

He went on further to speak of "the wrenching disruption of life and education caused by an unwanted pregnancy and its consequences" and referred to this as "a form of bondage for the child-mother and the mother's child." In view of this recognition and the frequent linkage between teenage pregnancies and other pervasive social problems such as poverty, unemployment, lack of education, and family breakdown, it is bitterly ironic that nowhere is there mention of the choice of abortion or access to a full range of alternatives, counseling. To be provided with full information about all options available so that the pregnant teenager can make her own choice is the only fair way to deal with a situation which, as even the Secretary has testified, can be totally devastating to her life and future.

Clearly, for over 300,000 teenagers annually—and we hear 370,000 in 1976—abortion has been their only option. Califano orally testified that 90 percent of the life script for a teenage mother was already written for her. How then can one know and speak so compellingly of the dismal fate of these young teenagers and yet ignore, and in many cases, deny their right to a future, their right to a choice? This bill, which has so little funding for the goals set forth, including prenatal, delivery, and postpartum care, plus day care and job counseling and education, never mentions nor did Secretary Califano discuss, that very necessary option for some teenagers—abortion. But we would like to work toward minimizing the use of abortion. But there are and will continue to be teenagers who are not reached or who have not used contraception effectively. Punishing them, forcing them to complete an unwanted pregnancy is not the answer to the problem of teenage pregnancy. And once pregnant, it is too late to talk about prevention.

In conclusion, NARAL finds that H.R. 12146 has tried to be all things to all people by failure to define specific goals, services, priorities, and evaluation mechanisms. The funding for such a wide-ranging bill is grossly inadequate. It is disappointing that Secretary Califano has not actually testified upon the actual content of this bill, but instead more generally upon the problem of teenage pregnancy—the seriousness of which everyone is already convinced. We feel that the bill is far too ambiguous and leaves too many important questions unanswered, including the right of teenagers to receive full counseling of all options. Significant revisions should be made to carefully define the greatest needs in conjunction with realistic goals and a realistic budget.

We would also like to suggest a place for the program within the Department of HEW would appropriately be under the Deputy Assistant Secretary for Population Affairs. The Deputy already has the responsibility under title X legislation for directing family planning services within the various health agencies. Since the purposes of this legislation are so closely related, it would be coun-

terproductive to place the responsibility in another office of HEW.
Such an action would negate the whole concept of linkage.

Thank you.

[The prepared testimony of Karen Mulhauser follows:]

TESTIMONY OF KAREN MILHAMMER, EXECUTIVE DIRECTOR, NATIONAL ABORTION RIGHTS
ACTION LEAGUE BEFORE THE HOUSE SUBCOMMITTEE ON SELECT EDUCATION, JULY 24, 1978
REGARDING H.R. 12146

Mr. Chairman and Members of the Committee:

I am Karen Milhammer, Executive Director of the National Abortion Rights Action League (NARAL), a national membership organization dedicated to the principle that abortion must remain a legal and accessible alternative for all women, regardless of their age and economic status. In addition, we strongly support and work for efforts to minimize the need for abortion. I appreciate the opportunity to be here today to express NARAL's concerns relative to H.R. 12146, the Administration's proposed "Adolescent Health, Services, and Pregnancy Prevention and Care Act of 1978."

As a former junior high science teacher and family planning counselor, I can personally attest to the gravity and tragedy of the situation teenage pregnancy brings into the lives of so many of our young people, as well as the lives of their parents. Therefore, we commend the Administration for bringing attention to bear upon this sensitive and critical problem of adolescent pregnancy through increased legislative undertakings. However, we must question the wisdom of this particular piece of legislation—H.R. 12146—and the Administration's actual intent and purpose in introducing this bill—which we believe has many serious shortcomings—just one month before all authorizing legislation was to have been reported out of committee.

It appears to us that H.R. 12146 is exceedingly ambiguous in what its accomplishable goals are and the means by which they would be achieved. The \$60 million budget request for this bill is very small when put against the

general purposes of the bill and the "comprehensive" preventive and prenatal and postpartum services it says could be provided. Furthermore, H.R. 12146 does not mandate any particular services or programs that definitely must be provided under its auspices. So it is not at all clear what would be provided or funded under the Administration's proposal as it now stands. In addition, there are no priorities established for what services should be emphasized and what proportion of funding should be allocated to them. This has not been cleaned up by either Secretary Califano's written or oral testimony before other Congressional committees.

Although a primary goal of H.R. 12146 is purportedly prevention of initial and repeat pregnancies among adolescents, we are struck by the Administration's failure to reflect this concern and sentiment in its budget requests for the reauthorization of Title X—which has been an effective and the major vehicle for provision of preventive medical services and education for teenagers, as well as for adults. Yet it has been the Congress which has pushed for additional Title X funding for family planning and other preventive services. Coupled with the vagueness of the Administration's proposal as well as no clear future commitment to this program, we must ask if the Administration's primary interest is in developing an effective means of dealing with adolescent pregnancy or whether it is using this hurried-up proposal to launch a complimentary public relations initiative on a problem in which there is acute public concern.

We agree with the Secretary that pregnancy prevention should be the major thrust of this bill, but nowhere in the bill are preventive services clearly defined. The bill simply states that funds may be used "to prevent unwanted initial and repeat pregnancies among adolescents." Nowhere can one find how much of the authorized funds will go for preventive services. Do preventive services include only family planning, or do they also include counselling and

sex and family life education? What kinds of family planning services would be funded? How will this program interact with those preventive programs already in existence under Title X? For the most cost-effectiveness, as well as the greatest benefit to target populations, this new legislation should not duplicate or attempt to replace Title X but should instead address itself to those specific prevention areas not presently covered by Title X, such as sex and family life education. Family life and sex education are vitally important as a line of attack in preventing unwanted teenage pregnancies. Without the understanding and sense of responsibility gained from such education, there is little motivation to make responsible decisions about one's sexuality and pregnancy prevention. It is essential that "parenting" and "sex" education be directed not only at teenagers but also towards their parents whenever possible. The family ideally should be the primary source of honest and responsible sex education. However, many times through their own lack of knowledge or awkwardness in dealing with the subject, parents feel threatened and resentful of outside efforts to provide their teenagers with necessary information--even though it is not provided at home.

Efforts to involve parents in community family life and sex education programs could go far towards providing teenagers better sex education and a better understanding of sexual and parenting responsibilities at home--or at least help some parents understand why they or their teenagers feel awkward dealing with the subject and, therefore, why their adolescents need some information and counselling from outside the home. At the least, those pockets of parental resistance to sex education could be minimized. Increased emphasis should also be placed upon the involvement of the sexually active adolescent male in prevention and sex education programs.

Experience has shown that no single prevention service or program is ever

going to be successful in all cases. There must be a variety of approaches, (or personnel) to respond to individuals' different personalities and needs. For example, educational counselling and prevention programs for a 13 year old should be handled differently than they would for an older (16) and more sophisticated teenager. Because of the obvious importance of the family unit, we would strongly recommend inclusion of parent education as an integral part of pregnancy prevention programs.

This lack of clearly defined priorities presents additional problems when one looks at the area of "comprehensive services." This phrase receives frequent mention throughout the bill, but it is never specified what shall actually constitute such services, whether there shall be a core of priority services or whether there would simply be a haphazard arrangement of funding any of the services mentioned in the bill. The problem of differing needs, and therefore different approaches for very young adolescents as opposed to older teenagers is not recognized. Nor is the involvement or responsibility of the adolescent male ever addressed. Yet these are terribly important if prevention and other services are to be truly effective.

We believe that comprehensive services are important for adolescents and should include the following:

1. Sex education and contraceptive services;
2. Early pregnancy detection services and referral or counselling for all alternatives--from abortion to adoption to keeping the child;
3. Prenatal and postpartum health care for those teenagers who decide to continue their pregnancies;
4. Supportive services such as day care, continuing education and vocational counselling.

What is most obvious about these these services is the extremely high cost. The program outlined here can in no way be accomplished with \$60 million.

One of the most expensive is day care, yet without some such provision, how is a teenager to complete her schooling or be able to find and hold a job so that she can become a "productive and independent contributor(s) to family and community life" as the bill states.

Although confronted with overwhelming costs for a wide array of non-prioritized services, the bill in question has as a principal focus and as the recipient of half the funding what is called "linkage." We would submit that linkage or coordination of existing programs and services should not require new legislation, should already be going on, and should certainly not be the recipient of half the funds involved when the other needs are so great. Indeed, the bill's preoccupation with "linkage" implies that there are already available services which simply need to be put into a network. We would strongly challenge this assumption; in many areas preventive programs and other services have yet to be initiated.

Another area of concern is who would actually be responsible for the coordination and direction of this teenage pregnancy initiative? According to H.R. 12146, it appears that all administrative authority would rest with the HHS Secretary. We would suggest that the most logical place of administration would be the Office of Population Affairs (OPA), which is headed by the Deputy Assistant Secretary for Population Affairs (DAPSA). The DAPSA already has the responsibility under the Title X legislation for directing population research and family planning services within the various health agencies. Since the purposes of H.R. 12146 are so closely related, it would be counterproductive to place the responsibility for its administration in another office of HHS. Such an action would, in fact, directly negate the whole concept of "linkage."

This brings us to the major irony of this proposed legislation. We are all too familiar with the awesome statistics of teenage pregnancy:

- nearly one million teenagers become pregnant annually;
 - 400,000 continue their pregnancies; of these, nearly 94% keep the child;
 - over 300,000 have abortions; the remainder end in miscarriages, stillbirths, etc.;
 - 30,000 pregnancies occur to girls 14 or under;
 - 3 of 10 teenagers who are mothers by 17 never complete high school;
 - 1/2 of all mothers in AFDC families had their first child while an adolescent;
 - 3 of all children born out-of-wedlock, nearly 50% end up on welfare;
 - 1/4 of those who give birth, have another pregnancy within a year;
- ...and it goes on and on. Other testimony has graphically detailed facts of life for many teenagers who become parents as the result of an unwanted pregnancy.

When Secretary Califano testified before the Senate Human Resources Committee and the House Subcommittee on Public Health and Environment, he eloquently and accurately painted the dismal picture facing most teenagers who become pregnant—to say nothing of the babies born to them. As the Secretary pointed out, teenage pregnancy is "the entry into parenthood of individuals who are often barely beyond childhood themselves." He went on to say, "But for hundreds of thousands of teenagers—particularly the majority who are unmarried—the birth of a child can usher in a dismal future of unemployment, poverty, family breakdown, emotional stress, dependency on public agencies, and health problems for mother and child." He went on further to speak of "the wrenching disruption of life and education caused by an unwanted pregnancy and its consequences," and referred to this as "a form of bondage for the child-mother and the mother's child." In view of this recognition of the frequent linkage between teenage pregnancies and other pervasive social problems such as poverty, unemployment, lack of education, and family breakdown, it is bitterly ironic that nowhere is there mention of the choice of abortion or access to a full range of alternatives

counselling. To be provided with full information about all options available so that the pregnant teenager can make her own choice is the only fair way to deal with a situation which, as even the Secretary has testified, can be totally devastating to her life and future.

Clearly, for over 300,000 teenagers annually, abortion has been their only option. Califano orally testified that 90% of the life script for a teenage mother was already written for her. How then can one know and speak so compellingly of the dismal fate of these young teenagers and yet ignore, and in many cases, deny their right to a future, their right to a choice? This bill, which has so little funding for the goals set forth, including prenatal, delivery and postpartum care, plus day care and job counselling and education, never mentions nor did Secretary Califano discuss, that very necessary option for some teenagers—abortion. Prevention is clearly the key—but there are and will continue to be teenagers who are not reached or who have not used contraception effectively. Punishing them, forcing them to complete an unwanted pregnancy is not the answer to the problem of teenage pregnancy. And once pregnant, it is too late to talk about prevention. As shown in the Secretary's testimony, that only leads to more problems—and of a pervasive social nature. For these adolescents, all choices must be made available in an even-handed manner if we are to truly help these young people toward responsible sexuality and adulthood—and a future.

In conclusion, NAWAL finds that H.R. 12146 has tried to be all things to all people by failure to define specific goals, services, priorities, and evaluation mechanisms. The funding for such a wide-ranging bill is grossly inadequate. It is disappointing that Califano has not actually testified upon the actual content of this bill, but instead more generally upon the problem of teenage pregnancy—the seriousness of which everyone is already convinced. We feel that the bill is far too ambiguous and leaves too many important questions unanswered, including the right of teenagers to receive full counselling of all options. Significant revisions should be made to carefully define the greatest needs in conjunction with realistic goals and a realistic budget.

Mr. MILLER. We will have to recess for about 5 or 10 minutes so I can record my vote.

[Recess.]

Mr. MILLER. The committee will reconvene.

Mr. Sanchez, if you would like to go ahead with your testimony.

STATEMENT OF RODOLFO B. SANCHEZ, NATIONAL EXECUTIVE DIRECTOR, THE NATIONAL COALITION OF HISPANIC MENTAL HEALTH AND HUMAN SERVICES ORGANIZATIONS, COSSMHO

Mr. SANCHEZ. I was going to start off my presentation by telling you I hope my presentation is received like the Lord receive the widow's gift; are you familiar with it in the Old Testament?

Mr. MILLER. Well, I don't know if I should answer that question or not.

Mr. SANCHEZ. The rich gave and then the widow came and gave a little, and her little was a lot for her. So with that, I will start.

Mr. MILLER. And we shall judge.

Mr. SANCHEZ. That's right.

I was also commenting, sir, I said, my God, Congressman Miller has not broken my record; seven times I have testified and seven times I am the last one.

Anyway, sir, for the sake of time, Congressman Miller and members of the subcommittee, I will highlight certain specifics that reflect our deep concern for new and improved programs that address the adolescent pregnancy and care but I think it's also necessary to go into a little of the historical and viewpoint of where the Hispanic community stands.

We are the second largest minority in this country and projected to be No. 1. Hispanics are a young population, medium age, 20.7 years compared to 28.6 years for the general population.

About 44 percent of all Hispanics are under age 18 compared to 31.9 percent for the general population.

Fertility of Hispanic women is about 26 percent higher than the total childbearing population.

Special studies of the proportion of illegitimate births show a need for social services to Spanish-heritage mothers living in poverty areas of large cities. Like the need for family planning assistance, the need for social services to children born to unmarried parents is proportional to economic status.

Studies show that below average proportions of Hispanic women receive family planning assistance from organized services and other sources. This indicates a need for improved family planning services to Hispanic women.

Depressed socioeconomic conditions among Hispanics make it difficult to mount effective measures for prevention through traditional youth service systems, such as schools and community groups. Dropout rates for our youth are estimated at 33 percent for the overall student population and run as high as 77 percent in such cities as New York, Chicago, and Los Angeles.

Also, these conditions make it hard to provide comprehensive, sustained care to our pregnant adolescents and to help them prepare for the future. One of every two of our families lives in hazardous urban environments, facing such problems as poor sanitation, high incidences of childhood diseases, poor nutrition, sub-

standard housing, overcrowded housing, and low levels of urban services.

Hispanic adolescents are twice as likely to belong to large families, those with seven or more members, than the general population, and these families are the poorest, 37.7 percent living below the poverty level.

I will comment on the following recommendations, one, that this legislation specifically incorporated the provision of programs and services with a bilingual and bicultural context, one serving areas with changing populations where concentrations of bilingual and bicultural people exist.

I think it is very important as some of my colleagues have said today, to recognize that the amount of money asked for are totally unrealistic. I think that we need to look at a variety of things when we talk about comprehensive services.

I think we have to find a way in the legislation to incorporate existing programs into an active educational service, education or delivery of services such as in community health centers, mental health centers, and a variety of other existing programs.

I think that we are deceiving ourselves, sir, when we don't, as parents, we don't know that sexual activity among our adolescents is increasing and I think we, as parents, forget when we were teenagers, and that there is sexual urge there and there needs to be more understanding on the parents' side and there needs to be an education of the parents.

As I was commenting to an individual right before I came to speak to you, sir, I don't like to use the term because it's sometimes misunderstood, but the blind cannot lead the blind in very heavy traffic.

Take, for instance, if we have a 33 to 75 percent dropout in the Hispanic communities, and these individuals become parents and most of them adolescents to begin with, as some of the indications of a survey we did recently in our membership in East Los Angeles, we reported in 1975, 80,816 Hispanic mothers between the ages of 15 and 19.

I did not use a lot of the statistics, sir, because we don't have any statistics for the Hispanic community. The National Center for Health Statistics and the State agencies continue to ignore Public Law 94-311 which mandated HEW to gather statistics, economic and health and social statistics on Hispanics. Some of the figures show these are the kinds of statistics we have in our communities.

Take, for instance, out of the 80,816 mothers that I quoted, these teenaged mothers gave birth to 47,979 babies. If 80,000 mothers give birth to 47,000, what happened to the remaining? When I asked on the telephone, no one knew. And that is the kind of inaccurate data we have.

I think if this program is going to be successful, you need to combine, as Janet said earlier, demonstration projects to be able to assess how real the problem is and to what depth it is, to be able to look into the school systems and see what States are progressive enough to include sex education.

We need to look at also what the media is doing. I mentioned this when I testified on the White House Conference on Families.

Recently I saw a television program that really shocked me, sir. I saw this television program and there was a young girl, they didn't show the scene, but the young boy comes in and says to the mother, "what is Jane doing," and she says, "well, she is doing the normal stuff," and the father walks in and says to the mother, "what's Jane doing," and she says, "the same thing you were doing to me."

The grandmother comes in and is very upset and the mother says this is normal, and finally the young girl came in and said, "Wow, I didn't think Johnny could show me all these things." Finally, she leaves and the father says, "where is she going," and the mother says, "to do the same thing you did to me," and with almost that kind of encouragement, it's no wonder it is alarming and we have a tremendous increase in teenage pregnancy.

We are not able to tell you in the Hispanic community to what extent adolescent pregnancy is taking place but, as I mentioned to you, if we have a population where 44 percent of our communities is under 18, that certainly is an indication that we are going to continue having an alarming rise in adolescent pregnancy.

I also remember as a social worker, I was a social worker in California for 4 years, as one of my colleagues commented earlier, I saw the continuous regeneration or rejuvenation of this type thing. The mother, in one case I had a mother who had come onto the welfare rolls back in 1938 or 1939, and she had a couple of daughters, and they got into trouble and I was almost getting to the third generation.

I think that we are really going to have to look at all facets. We are going to have to look at how best we can go and work with the schools, we are going to have to tie in with the welfare department agencies. We are going to have to tie in with health services, and a variety of others.

I cannot agree with what one of my colleagues said earlier here today, that these moneys should be provided for already existing programs, because I wonder how many minority communities have these types of programs going on?

I know for us in the Hispanic community we don't have very much. There are just a handful that are totally dedicated for addressing adolescent pregnancy.

I strongly approve of the recommendation of the Advisory Council so that minorities can be included in having input. I am glad that the bill addresses the high priority for areas of poor economic conditions and poverty.

I will tell you that I definitely disagree with a section of the bill that says that priority will be given or that moneys will not be given to areas that cannot substantiate their needs. Certainly that will leave the Hispanic community out because without any statistics we will not be able to substantiate that.

Thank you very much, sir.

[The prepared statement of Rodolfo Sanchez follows:]

The National
Coalition of Hispanic Mental
Health and Human Services
Organizations



1725 K Street, N.W., Suite 1212
Washington, DC 20006
(202) 466-2260

STATEMENT

on

ADOLESCENT HEALTH, SERVICES, AND
PREGNANCY PREVENTION AND CARE ACT

Presented to

THE SUBCOMMITTEE ON SELECT EDUCATION
COMMITTEE ON EDUCATION AND LABOR
U.S. HOUSE OF REPRESENTATIVES

July 24, 1978

COSSMHO--THE NATIONAL COALITION OF
HISPANIC MENTAL HEALTH AND
HUMAN SERVICES ORGANIZATIONS

Rodolfo B. Sanchez
National Executive Director

MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE:

I am Rodolfo B. Sanchez, the National Executive Director of COSSMHO-- The National Coalition of Hispanic Mental Health and Human Services Organizations.

On behalf of COSSMHO, I am pleased to appear before you today to share with you some of our views and concerns regarding the Adolescent Health, Services, and Pregnancy Prevention and Care Act of 1978.

My statement today is based on and reflects the comments, experience, and recommendations gathered during a selective sampling of our nationwide membership.

As you know, COSSMHO is comprised of more than 180 community-based agencies, five national Hispanic organizations, and hundreds of dedicated professionals and paraprofessionals (both Hispanic and non-Hispanic), now working to address the health, mental health, drug and alcohol abuse, and related human service needs of Mexican-American, Puerto Rican, Cuban, and Latino communities throughout this country.

Our members are active in over 120 cities in 30 States, the District of Columbia, and the Commonwealth of Puerto Rico. Together, our members impact on over 1.5 million Hispanic families and individuals at the local community level.

The five national Hispanic organizations that are members of COSSMHO include: the National Association of Spanish-Speaking/Spanish-Surnamed Nurses, the National Concilio of America, Aspira of America, the National Association of Cuban-American Women, and the Cuban National Planning Council.

Among our member agencies involved in health and mental health fields are a wide variety of programs and projects in diverse service settings: multiservice agencies and centers, health centers and clinics, community mental health centers, community agencies and program components focusing on drug and alcohol abuse treatment and prevention, agencies that offer services to special populations (such as families, children and youth, and the elderly), and research and training centers.

Teenage pregnancy is identified by many experts as a growing, serious, and complex social problem, one that cuts across income, education, social class, and racial/ethnic distinctions. We recognize that it arises in part from vast social changes in mores over which we have little control. But we also know that for hundreds of thousands of teenagers -- especially the majority who are not married -- it is often linked with other social problems that we can alleviate: poverty, unemployment, limited education, family and personal stress, dependency on public agencies, and health problems for both mother and child.

Our membership survey indicated that many Hispanics, together with those in other communities in the Nation, are deeply concerned about the increasing number of pregnant teenagers, the overall rise in premarital sexual activity among our youth, the intergenerational conflicts that may erupt as a result of adolescent pregnancy, and the dubious future prospects that may confront teenage parents and their children, especially those whose social and economic backgrounds offer them limited choices.

But our membership survey also revealed that for Hispanics, unlike many other communities in the Nation, the problem and its solution call for not

only better coordinated resources, but also more actual resources, and further require the application of these resources through projects and programs that acknowledge, respect, and strengthen the bilingual/bicultural context of our youth and their families.

I cannot give you an array of statistics about the nationwide extent of the problem of teenage pregnancy among our communities. As you know, this type of information and data gathering on Hispanics is not widespread among public agencies at Federal, State, or local levels, although under the impetus of P.L. 94-311 we hope this knowledge gap will be filled soon. However, HEW data on the problem can be assumed to reflect, in the aggregate, some of the major health and social dimensions of this problem among us (although, I must add, not its diverse cultural dimensions).

My purpose today is to share with you some additional information and documentation that highlight Hispanic concerns with this issue.

Among our members surveyed -- that is, men and women who are actively involved in working at the community level to provide services to our families and individuals in need -- there is a consensus that Hispanics have a high incidence of adolescent pregnancy, that those most affected are low-income families, and that pregnancy prevention and care services are limited and, in many locales, non-existent.

This community consensus is further underscored by other indicators of both present and projected need.

At our request several months ago, the National Center for Health Statistics prepared a paper which reviewed its extant health data on Hispanics. Some of the findings of this paper, together with census data, point to the following facts as relevant to this inquiry.

-- Hispanics are a young population. For us the median age is 20.7 years compared to 28.6 years for the general population.

-- About 44% of all Hispanics are under age 18, compared to 30% for the general population.

-- The fertility of Hispanic women (except among Cuban-Americans who tend to be an older population group than most Hispanics) is about 20% above that of the total childbearing population.

-- Family planning services needed by Hispanic women tend to be those needed by the general population because the level and kinds of contraceptive use tend not to be different. Among the women surveyed, two-thirds of Hispanic wives of fertile age were contraceptors in 1976 and 80% of their births were wanted. These figures are close to those of other groups.

-- Special studies of the proportion of illegitimate births show a need for social services to Spanish-heritage mothers living in poverty areas of large cities.

-- Like the need for family planning assistance, the need for social services to children born out of wedlock is proportional to economic status.

-- A need for improved family planning services delivery to Hispanic women is shown by the below-average proportions of them receiving such care from organized services and other sources.

Moreover, the depressed socio-economic conditions that prevail among our communities -- at rates far out of proportion to the rest of the U.S. population -- make it extremely difficult to provide comprehensive, sustained care to our pregnant adolescents and to help them prepare for the future. These conditions also make it difficult to mount effective measures

for prevention through such youth serving systems as the schools and community groups, systems that do not reach or sustain contact with our youth.

-- Although the Hispanic population is distributed nationwide, 84% are urban dwellers; most live in the central core of major metropolitan areas. One of every two of our families, as compared to one in four for the general population, lives in a hazardous urban environment. One-fourth live in overcrowded conditions, compared to one-twelfth for the general population. Moreover, these families daily face such health problems as poor sanitation, high incidences of childhood diseases, poor nutrition, and generally low levels of urban services.

Of the remaining 16%, 12% live in rural areas and face similar conditions of overcrowding, poor sanitation, and substandard housing. Among Hispanic migrant and seasonal farmworkers, such conditions are endemic.

→ -- Hispanic adolescents and children are twice as likely to belong to large families (that is, those including seven or more members) than the general population, and these families are the poorest -- 37.7% live below the poverty level.

-- Although young Hispanics tend to have more education than their elders, dropout rates for our youth are estimated at 33% for the overall student population and run as high as 77% in such cities as New York, Chicago, and Los Angeles. These figures are startling. The level of education directly affects the level of income of our families. Census data show that among those families not headed by a high school graduate, a significantly higher percentage -- 32% -- are below the poverty level, compared with 10% of those families headed by a high school graduate.

-- The employment outlook for teenage parents is grim. For Hispanics as a whole, it is a complex situation of high unemployment and subemployment for large families as well as barriers to good paying jobs. Among our youth, the unemployment rate is higher than that for all youths, but is lower than that for black youth: for example, in October 1977 the unemployment rate for Hispanic youth ages 16-24 was 13.8%, compared with 12.2% for all youth and 29.2% for black youth. However, data for October 1976 suggest that the unemployment rate for Puerto Rican youth is quite close to that for blacks. Some of the reasons for this above-average unemployment among most Hispanic youth are educational disadvantages, language barriers, discrimination, and location. In addition, a significant number of Mexican-American youth are employed as migratory farm workers, a sector of the economy that has high frictional and high seasonal unemployment.

-- The amount of income resources, so often correlated with the maintenance of good health and mental health in families, is also quite limited. About 25% of all Hispanic families live below the poverty level, compared to only 10% of families in the general population. Mainland Puerto Ricans have a 33.5% poverty rate, followed by Mexican-Americans with 26.5%, Latinos with 18.2%, and Cubans with 17%. On the island of Puerto Rico, conditions were much worse, with 65% of all persons and 72% of all related children under age 18 living in poverty. Moreover, with regard to income, the differential between Mexican-American families and white families has remained steady at .72 over the past five years. Puerto Ricans saw a drop in their relative incomes over the 15-year period from 1959 to 1974, as family earnings decreased from 71% of the national average to 59%.

Mr. Chairman and members of this subcommittee, in light of these conditions prevailing among Hispanic communities and having a profound impact on our youth, their hopes and aspirations, this legislation, together with other components of the Administration's initiative on teenage pregnancy, is welcome and is responsive to perceived needs.

Because of the conditions which I have outlined, I do hope that under the new program Hispanic teenagers will have improved access not only to the new resources to be made available, but also to the existing resources that are to be targeted on groups with especially adverse needs.

But it is even more important that these resources, whether new or re-targeted, be made available and accessible to our youth in appropriate bilingual/bicultural contexts. This is essential for success. It is a well-known and documented fact that the failure to provide bilingual/bicultural components in most health and mental health programs has directly contributed to the underutilization of services. Other studies have shown that, due to the importance of the concept of the family in Hispanic cultures, services can be more effectively delivered in the context of the family, and this implies expert knowledge in its functioning, values, and mores, as well as sensitivity to and experience with its dynamics. In such a deeply personal and culturally significant event as conception, birth, and parenting, the need for culture-specific and culture-sensitive planning and programming is quite evident.

For this reason, we request that the language of the legislation or any report accompanying it specify that it is Congressional intent that projects and programs providing services under the Act provide such services, or make arrangements to provide such services, in bilingual/bicultural contexts.

when serving areas with significant population concentrations of persons with limited English-speaking ability. Such a clear statement of intent will provide guidance to HEW in writing regulations for the program and in establishing criteria for applicant eligibility. Perhaps it may seem that providing services in such a way as to be relate most effectively to those being served is a proposition that needs no further elaboration. However, it is our general experience that such a clear statement of Congressional intent is needed to counter agency ambiguity on this point and to insure that our people are reached and served.

Such a sharp focus on the special dimensions of providing teenage pregnancy prevention and care services to Hispanic youth and their families should also serve to highlight the innovative, culture-specific approaches already being used in several of our communities. Among these are several programs that were consulted in our membership survey for this presentation, including the Comprehensive Community Health and Social Services Center serving Latinos in Southwest Detroit and the Hispanic Family Foundation in East Los Angeles. The knowledge, skills, and expertise available in such Hispanic-directed programs as these should prove valuable to those planning and implementing a nationwide teenage pregnancy prevention and care initiative.

Thank you.

Mr. MILLER. Thank you, Mr. Sanchez.

One of the concerns that I have, as I read the legislation, is the extent to which we would be setting up a situation where the person in need of the services would have to seek out those services.

The bill is replete with almost every section talking about this linkage that is going to take place between these services in the various centers, whether they be a primary health center or mental health program or nutritional program in different centers.

Is it your understanding that that is what would take place, that, in fact, we would in some instances really create a path for young people to find these services and to avail themselves of those services?

Is that what you are talking about there?

Ms. FORBUSH. To some extent I think the interpretation of linkage or coordination is left up to whomever it is that you are talking about. But I think basically by allowing a local program to get

additional funds to augment whatever coordination they might have put into place already is what we are talking about.

Adolescents frequently don't know where to go to in their communities. And there has not been in several of these existing programs an outreach component which includes public information that might be a brochure, public affairs announcement on local television stations.

Kids don't know where to go, and school programs are notoriously weak in not advertising what the services might be that are available either in the school or in other agencies. But, basically, our interpretation of the coordination is that the funds that grantees would be getting would help the adolescent be put in context with all of the services that they need.

Now, how they go about doing that is left up to the creativity and imagination of the people who are applying for the funds, and then in turn left up to the interpretation of people who decide if they are going to get the grant or not. It needs to be specified and made more clear.

Mr. MILLER. My concern is that for a certain period of time here, maybe up until a young person is 13 or 14 years old, we have a pretty good idea of where that child is for a fair portion of the day. The child is in school; they may be hanging out in the hallways, or they may actually be in class, but in most cases he is, I think a very significant percentage of these young people are, in fact, there.

My concern is that whether we are in the wrong track in making the child, they are, not necessarily children, but making these individuals seek out the services rather than sort of getting the services off their dead rear ends and into the schools which are notorious, I admit, for doing almost nothing constructive.

I am reminded of what is the program on TV, "M.A.S.H." where Radar announces every now and then that the doctor will be by to check to see if anybody has VD, somebody else will come by if you want to donate any blood but, obviously, the people in that compound don't have to go out searching out for these things, somebody comes to them and I look at our situation in California where we are closing schools or shutting down schoolrooms because of the declining enrollment in all areas of education and I wonder why, don't we make the county mental health people and the county hospital in that case or other people come to the school to provide the counseling, the services and so forth and let people avail themselves of it?

I mean, really, just from my own experience I have to believe it would be more constructive than the 45-minute study hall that the school found so mandatory in your program, that you have in a 45-minute study hall. I might have a 45-minute period where you could avail yourself of vocational training or pregnancy counseling or parental counseling, and I just worry what this \$60 million is going to buy us other than a lot of pamphlets that if you can find them may help you.

If we know where these young people are, unless I am crazy and they are not there, I am sure there is a good percentage that never get there, but why wouldn't we reverse the process?

Ms. MECKLENBURG. There should be a link with the schools and programs which work well. Many of the model programs are tied up very closely with the school system. I am aware of some which are actually in the school system.

The kind of point that you make there is very well worth making. A pregnant adolescent who does not know their way through the system, necessarily, and may not be able to find the kind of help they need on their own, even if there are linkages, I am sure we have to make it very clear that these programs, linked or whether they are separate entities, self-contained are, in fact, searching out the people at risk and have a very aggressive public relations campaign so that young people do know where to find them.

That is really the reason for linkages, I would say, if you have a center somewhere providing services, then the rest of the community has to know these services exist.

My husband is an obstetrician. Does he know where to send a troubled adolescent girl to obtain the services far beyond his medical services, as important as his services are. This can be asked of other medical providers or social workers or school counselors or school nurses. It is important that these elements of the community know where to send girls and they are linked at least to the medical stage.

In some cases, they would be sharing care. You may have a small community where you cannot put a comprehensive center together to treat pregnant adolescents, but you can make sure that somebody is a central point and that the services they need are available and they are working together so the needs of the girl and the family are met as adequately as possible. I think that is an important concept and the reason to have linkages in the bill.

Mr. MILLER. Again, let me repeat my concern. On page 10 of the bill where we outline the core programs, vocational counseling, let me suggest this Government already spends a fortune on vocational education and vocational counseling. It may be inappropriately delivered under the present system, but there is sufficient money, primary and preventive health. I know in the vast number of schools we teach courses, as inadequate as they be, they are there. We just put \$26 million in a feeding program in the school lunch bill. So now you are going to put \$60 million on top of this, and it is not clear to me when reading this bill as to what you are buying in terms of delivery of services to young people who need this help which cannot be purchased with better direction within the institutions.

Let me say, I am not a strong believer the school system should be delivering all these systems, certainly not in the manner in which they are run today. But when you are talking about what every witness so far has said is a totally inadequate amount of money, I have to be concerned as to what you are doing with that, or can you piggyback on what is already existing. Can you invite the health and mental health counselors in the school three times a week.

If the statistics and numbers are true as they relate to suicides, which relate to female and male, should we wait until they come into the crisis clinic, or the what is this, so-called health sciences

which we teach? I forget what it was called when I was there, but it certainly did not deal with that; and I just do not understand how we can talk about spending \$60 million when we have an existing delivery system which has failed. Maybe I am wrong, but I tend to think I am right. But the question is where should the money be spent, build this concept of services which is somehow linked, but the person in need has to wander down the yellow brick road, and I suggest they are maybe 6 to 8 months pregnant, and a lot of the services at that point will be obsolete.

So, I am a little bit concerned because my short experience here is that we somehow, the best intentions to deliver services, the services are not delivered. There are a lot of people shuffling cards, but how do we get those services in the most direct fashion.

Ms. FORBUSH. Your concern is shared by those of us sitting here. In terms of what do we get with the money we have here, what are we buying, one of the things in our analysis of this legislation, we tried to define from our perspective what the core services are which are needed. We have done that as to the health and social service domains not only for the youngster who may be pregnant but also as to the needs of service providers themselves. They are not spoken to with any clarity in this bill. In terms of the list provided within the language of the bill, it is inadequate. There is some fuzziness with regard to what is core essential and what might be a peripheral service. But those which we have included in our testimony on page 8, would be the list of services we feel to be essential, at least to have them available and identified and accessible to the adolescent or the young family unit, whether it is the grandfather, the young father, or the infant. Not all those services will be needed at all times, but they should be in shape. That is one of the weaknesses in the bill as it is now written.

Mr. SANCHEZ. I think you have brought a very good point, sir. I do not know whether I will be in good graces with my colleagues, but I see continually, I have been in this field for 15 years, and I think you have heard me say before, that I just cannot conceive how Congress or the people of our country—every time we have a crisis, every time we identify a need, what do we do? We bring a piece of legislation and we bring that legislation or support a piece of legislation because of our tremendous—I think out of frustration or a tremendous commitment to see something done. But I think you are very right when you say at what point does it stop, because we just continue building and building and not looking at what is already on the books.

I do not claim to know all the pieces of legislation which govern how many services in our country, but I think if presently the Health Services Act, which provides moneys for health centers, if it does not have something for adolescents, it should. I think when it is passed and they have provided these moneys—also for mental health—it did not say American bona fide citizen between the ages of 21 until he dies. It said provide services to those who need it. If it did not say that, it darn well should.

We have to look at existing programs in this country, otherwise we will be asking for \$1 billion. In my opinion, \$60 million will not even handle the Hispanic adolescent pregnancy problem.

Mr. MILLER. I hate to tell you what we figured. Just to deal with the question of 370,000 abortions, if you were to try to deal with those, it would cost several, several hundred million dollars if you were to be able to provide the level of service which we have heard from just this panel.

Ms. FORBUSH. While we would take issue with the way the core services have been defined here, and we would probably take issue with what seems to be a lack of coordination. Nevertheless, there are program efforts which have been going on which have in some small way made a positive impact in their communities. If we look at the \$60 million as a beginning effort in terms of improving coordination among human service programs, not only for pregnant adolescents but other constituencies, this is one of the likely results.

I think the advisory committee concept comes home even more clearly when we talk about whoever it is who wrote this and, how they arrived at the definition of services. Now, I do not know who did it and I have been trying to find out for the past several months. Invariably the response I get is the OMB imposed upon us this or that requirement. Well, perhaps that is the case, but in order to make this an effective piece of legislation—

Mr. MILLER. Let us never accuse them of taking care of pregnant women and young children—

Ms. FORBUSH. But there have been some programs which have been successful.

Mr. MILLER. I do not disagree with you, Janet, at all. As you know, we really are not suggesting to people there is a national initiative to take care of this problem. I do not think that is it. It may be with some changes—or it may be that I am reading it with bias and from the wrong direction. But if we are to tell people this is a national initiative I suggest we put the tools out front or we do not. Because I think it would be a very poor mistake to continue along in the manner which has happened in the past.

The reason for my question is, if the people who did put the legislation together, if they can think of alternative methods for delivery of those services within existing frameworks where you could possibly save more money and take care of more individuals, that is really the test, if you can take care of a need for the population you seek to serve.

Let me ask another question: Obviously, nowhere on page 9 or 10 is there any discussion other than how do we deal with the 370,000 people who chose abortion, and to suggest that somehow if it is not mentioned in this law it ceases to become an alternative, I think is at least naive. I just question how do you deal with this piece of legislation.

We just saw the example of what I think is a very meritorious piece of legislation in the pregnancy disability bill. There is an amendment attached to it which certainly caused me to vote against that bill after spending a number of years working for it.

What happens here as to telling people there are legal means by which they can go about and choose the alternative of abortion?

Ms. MECKLENBURG. When I referred to the fact that we should leave abortion services out of this bill, I was basing this partly on

my attitude and my organization's attitude, which is antiabortion except for very extreme situations.

But more than that, I was basing it on the attitude of the citizenry reflected in the latest polls, which I have included in the testimony I have submitted. The citizens in this country in the two polls I have seen say no to tax funds for abortion purposes. They are not willing to extend their tax money to provide abortion services, but they do say they are willing to use their tax money to help needy pregnant women continue their pregnancy.

There is a division in the country as to whether there should be a legal right to have an abortion. There is a smaller portion that says they are willing to help pay to make that universally or widely available, so that group becomes smaller to actually help implement abortion services.

So, I would feel while there is still a deep division in this country on abortion, it will give considerable difficulty to passing a bill to provide needed services if we interject provision of abortion services into the bill.

I am referring now to medical care, actual provision of abortions in the center. Obviously, abortion is now a legal option. If one is in the counseling process, one can hardly ignore the fact that abortion is a legal option and that it is available. To ignore that, I think, is a disservice. I think regardless of the persuasion you are on the abortion issue, you cannot put your head in the sand and ignore the fact it is a legal option. But that is a far cry from actually saying we will provide and pay for the carrying out of abortions.

I do not know if that is clear to you, but the way I would feel about it, it would be handled in the counseling services and it is actually available.

I would not like to see service providers mandated to refer for abortion. That again becomes a problem, because there are many individuals in this country and groups in this country who are providing a range of supportive services.

Chris Mooney was one, she testified. But she has found the resources and actually providing services. But if we were to say she had to provide abortions or abortion referrals there would be literally thousands of groups like this around the country who have been providing services not at Government expense who could not expand their facilities and would be discriminated against.

We might say the converse might be reasonable, too, that you cannot perhaps be prohibited for referring to abortion. Perhaps it would be a reasonable thing to say it is legal, it is an option, clearly you cannot ignore it, perhaps people's consciences could be thought of in this instance and you could say you do not have to refer for abortion. People can find abortion. As someone testified earlier, abortion costs \$120 where having the resources in continuing a pregnancy is far more expensive and demanding. I would say many women choose abortion because they simply do not have the resources to continue the pregnancy. They may be subtly coerced into abortion by tremendous social and economic pressures.

Our organization does not have a policy as to abortion referral. So I am speaking as an individual in that situation. I have not heard anything which would lead me to believe people in our organization do not realize it is a legal option.

Mr. SANCHEZ. I think, sir, this bill would be much more meaningful—throughout the whole 5 hours this morning, all of us have said the amount of money being requested is unrealistic. However, the majority of us have said we need something. So, perhaps, in order to keep something, we are going along with many things. But I think that perhaps we might take a second look at the bill and drop out certain sections of the services—it is the direct delivery, particularly of health care services, which will be insurmountable—and see where it fits in the already existing programs of our country and making it comply with for those who need the services. Look at the bill where with \$60 million, we look at this bill as an initiative, that there is a tremendous, like an epidemic of adolescent pregnancy in this country, that we launch a prevention along with local agencies, tie in with the schools, select or open to bid those agencies doing innovative things which can be replicable around the Nation. Work with the Campfire Girls, Boy Scouts, you name it. Also launch a survey. Everybody wants to research, but I think if we really look at the figures which have been presented today—I was dubious. I never heard anybody say nationwide all the causes, what, where, or when. Perhaps we need to get more information.

Ms. MULHAUSER. I would like to briefly respond to the whole issue. I think your idea is excellent as to not duplicating services where they already exist, but clearly they are underappropriated where they do exist.

—In the abortion services, they are so grossly underappropriated, there are no funds at all for that service.

The kind of attention that needs to be addressed to teenagers, I think we kind of glossed over it. Mrs. Mecklenburg mentioned polls which had to do with the public attitude as to providing the services and funding. There are 1,078 polls, but there are some which show a plurality. Where you have an individual who chooses abortion over continuation of pregnancy, as the public becomes more educated, especially in light of Proposition 13, as for voluntary services, perhaps the attitudes will change there as to public funding for abortion care.

Ms. FORBUSH. Within the range of core services, the national alliance feels very strongly that one of the options which must be introduced to adolescents coming into a comprehensive program is the option as to abortion services, just as the introduction about adoption services might be introduced.

I think to differentiate between counseling and referral processes and the actual abortion services would be something that we would go along with for purposes of this measure. But we feel very strongly that the abortion linkage, that is information about where an adolescent, her family and her partner might go, that should be included in a comprehensive program.

To some extent, based on information made available to our members, we have found that indeed is the case in some of the programs operating today, whether funded with public or private funds. They are introducing the options to the youngsters. Whether or not adolescents can indeed find abortion services is something I would disagree with in terms of the statement Marjorie made.

I think she made the statement adolescents, if they wanted, could find an abortion service, I do not agree with that. I think youngsters need assistance in being introduced to the options, and very literally some who are in the position of providing the services are in the position of taking the children there.

Mr. MILLER. Some of the programs the alliance works with do offer abortion counseling?

Ms. FORBUSH. Yes, and in some cases abortion services are provided within those programs, but it varies.

Mr. MILLER. It would be very easy to see because I do not believe you can put in language for counseling on abortion and have it pass the House: I do not think that is an option.

Ms. MECKLENBURG. Does it have to be written in specifically? Clearly a counselor would have to indicate what is available in the society and the options. I am not clear in my own mind that one has to be so explicit so as to say to either mandate or prohibit abortion counseling or referral. It would seem to me if you intercept an adolescent pregnant girl, you clearly can tell them there are these kinds of services available, abortion is an option, and that would just be part of the process without writing it in either one way or another.

If you were to provide abortion then it would seem clearly you would have to write that in as part of the core services.

Mr. MILLER. I understand that. My concern would be twofold: First, on the national, you would get an amendment which would prohibit counseling of services regarding abortion, and second, if you did not get that amendment, I think the question would then be the interpretation of the regulations and who would have the say so and how those were written. So I think, given the current mood, we have some very serious problems with this bill in that one aspect.

Ms. MECKLENBURG. May I comment on that?

Mr. SANCHEZ. I wanted to ask how does one justify with himself working with youth and they get pregnant and they come to you and you do not say anything—not that I am for it, but do you send them to go out wherever in looking for quacks or find homemade remedies? I do not see how—I just wanted to toss that to the Congress.

Mr. MILLER. Do not do it. You will not like the answer that comes back.

Ms. MECKLENBURG. You mentioned the pregnancy disability bill. We have been part of the coalition working for the passage of the pregnancy disability bill.

The amendment placed on that bill, the Beard amendment, might be instructive of something which might be done with this bill.

You interpreted the Beard amendment, I take it from your discussion, brief as it was, to be an antiabortion amendment. As a matter of fact, that amendment did not preclude the people in industry from covering abortion if they so decided. Neither did it mandate they cover abortion. It was a conscience clause which made it possible to get the bill through with a broad consensus of support, recognizing we would disagree about some things, but there were some important things we could agree about.

I might suggest for the record that perhaps we could address the fact that we could disagree as to some things about abortion in this bill, but there are some we can agree on. I would not like to see pregnant teenagers having programs instituted because we disagreed or refused to resolve disagreement. I would like to steer through that. Maybe some kind of conscience amendment is one way to do it. That is what I was suggesting earlier in my testimony.

Mr. MILLER. Well, I don't want to turn this into an abortion hearing, but what do you think would be the position of your organization on the amendment that would not prohibit abortion counseling?

Ms. MECKLENBURG. Well, I will have to give you my particular opinion, since I have not polled our board on this particular matter.

I suggest to you, personally, that it would seem to me that to neither mandate nor to prohibit counseling, to recognize abortion as a legal option, would be a reasonable way to proceed.

If we are talking about providing abortion services, that's entirely different and I would have to draw the line there.

Mr. MILLER. So you would support the Beard amendment on this?

Ms. MECKLENBURG. We support the bill with or without the Beard amendment. I could get into a discussion of that, but we support the bill as a pro life bill without the Beard amendment. However, we do not oppose that amendment and we think it is a reasonable compromise position which allows that bill to pass.

Mr. MILLER. Counsel, go ahead.

Ms. LARSON. Just in parting here, there has been a lot of disagreement about what the bill could usefully provide for \$60 million. Would any of you care to react to the suggestion that, for instance, the vast majority of that \$60 million be set aside for what might be termed pilot demonstration or planned variation or experimental programs? These could be built partially on existing programs, and partially on some brand new ones, but all would have a very heavy evaluation component. That way we would be talking not about trying to put a program in every community in the United States but talking more realistically about maybe 50 or 75 programs. The very heavy evaluation component, is important so that these programs could be compared, and so that 3 or 4 years down the road we would have something specific to look at. Would that help to settle some of your reservations about the vagueness of the bill at this point?

Ms. FORBUSH. You are talking there about having some consistent definition of what it is that each of those communities, however many there might be, would be doing; is that correct?

Ms. LARSON. Right; but not so rigid that you did not get some variation among them, which could then be assessed as to their effectiveness.

Ms. FORBUSH. Well, I would think that that has real appeal, great appeal; to a wide range of organizations and groups that have been working in this field.

I think our position, that was articulated in our testimony, about directing the primary aspect of the funds toward programs that

would be for pregnant adolescents or young parents, is still our position. We feel there is no—we know there is no categorical support in existence from any of the other title programs that specifically addresses school-aged parents or pregnant adolescents, although some funds within title X, title V, title I, in education do carve out small pieces for that population, there still is no categorical program; and we know that there is a need for that.

However, by allowing 25 to 35 percent of this \$60 million to be directed toward demonstration programs, with a strong evaluation component—and there, incidentally, must be a strong evaluation component in any of those programs or responsibility for programs that are already in place—we would support that, and I think that that has real merit.

There is one other issue of that, and that relates to where is it across this country that we will focus the dollars.

If you look at \$60 million and 50 States, you know that each would—if you just use straight arithmetic—get a little over \$1 million. Well, this week Governor Carey in New York—or last week—had introduced a supplemental item to the New York State budget, asking for \$1 million additional funding for purposes of, attacking—as was described in the New York Times article—the issue of adolescent pregnancy.

Now I don't know exactly how you attack adolescent pregnancy, but basically we feel there ought to be a regional apportionment of the funds so there are some existing programs that are augmented and allowed to add components and developing efforts in some logical rural communities could be also stimulated and supported.

Ms. MULHAUSER. I would be a lot more comfortable with the funding being used for some pilot programs; however, I think that the pilot programs would have to be the comprehensive kind that include services before teenagers get pregnant in addition to services for those teenagers who have become pregnant; but I think that would make a lot more sense than trying—as my testimony indicated—than trying to do everything for everyone with just \$60 million.

Mr. SANCHEZ. I very much agree with Janet's comments, and I think if you got that—I expressed very much what you asked, in the fact that we are trying to cover too much with too few dollars—I think we really have not looked seriously enough in depth at the existing services that we should be providing, at least some services to adolescents.

Ms. LARSON. Thank you.

Mr. MILLER. Thank you very much for your testimony.

The subcommittee stands adjourned.

[Whereupon, at 1:05 p.m., the hearing was adjourned.]

APPENDIX

The National
Coalition of Hispanic Mental
Health and Human Services
Organizations



1725 K Street, N.W., Suite 1212
Washington, DC 20006
(202) 466-2260

RODOLFO B. SANCHEZ
National Executive Director

BOARD OF DIRECTORS

J. Julian Rivera, M.S.W.,
Chairman
New York, NY

Edward Camarillo, Ph.D.,
Vice-Chairman
Sacramento, CA

Rev. Maria Velez, Ed.D.,
Secretary
Miami, FL

Reggie Chase
Treasurer
San Antonio, TX

John D. Acosta, M.S.W.,
Los Angeles, CA

Maria A. Angello, M.A.,
New York, NY

Milagros Garcia de Cordero, M.S.
Newton, MA

Ross C. Marin, D.S.W.
San Jose, PR

HELEN B. BROWN, Ph.D., R.N., F.A.A.N.
Seattle, WA

Jesse Carlos Sorrento, Jr., M.D.
Columbus, GA

General Counsel
John S. Hays
Washington, DC

July 26, 1978

The Honorable John Brademas
U.S. House of Representatives
Longworth HOB 1236
Washington, D. C. 20510

Dear Mr. Chairman:

I wish to thank you, and the members of your Committee, for giving me the opportunity to testify on Bill HR 12146. It was unfortunate that you were unable to be present at the time of my testimony due to your having to return to the floor. However, members of your Committee reflected great concern over this proposed legislation.

Mr. Chairman, as a National Hispanic organization deeply concerned with the increased adolescent pregnancies amongst Hispanic youth, we are supportive of a measure that will reduce the number of pregnancies not only in our communities, but throughout the nation. We do, however, feel that the amount of funds requested are very unrealistic and that in order to carry out successfully the various components of the proposed programs, this amount would have to be increased or certain proposed programmatic areas should be delayed.

It is our opinion that providing actual health care services should not be part of this legislation and that it would be more appropriate to have existing health services mandated to provide appropriate and necessary health care services to our pregnant adolescents.

We believe this legislation would be more successful if it were launched as a national demonstration project where funding could be made available to already existing success-

The Honorable John Brademas
July 26, 1978
Page two

ful models, as well as funding new projects where it is directly needed, such as Hispanic and other minority communities.

We do not believe it economically feasible to even consider covering the abortion costs in this legislation, but, at the same time, we should not deny adolescents who become pregnant proper alternatives through counseling practices. This is not to imply that we are for or against abortion, but rather, we believe that a young adolescent at such tender years should be made fully aware of the actions they take.

We also urge that this legislation provide for bi-lingual and bi-cultural differences in the delivery and planning of any programs included in any policy or program development of this legislation.

We also want to bring to your special attention that if this legislation requires that communities substantiate proof of an increasing rise in adolescent pregnancies in order to be eligible to participate, the Hispanic automatically would be left out due to the lack of maintaining adequate data on Hispanic adolescent pregnancy.

Mr. Chairman, we thank you very much for your kind attention.

Sincerely,


Rodolfo B. Sanchez

RBS:dav

cc: Members of the Committee

Statement by Clyde E. Shorey, Jr.
 Vice President for Public Affairs
 The National Foundation-March of Dimes
 on H.R. 12146
 Adolescent Health, Services and Pregnancy
 Prevention and Care Act of 1970

The goal of the March of Dimes is to Prevent birth defects and improve the outcome of pregnancy. To meet this goal we urge that every action be taken to meet the critical health risks to mother and infant that are too often the tragic results of adolescent pregnancy.

The March of Dimes supports the concepts of H.R. 12146.

1. We believe strongly in the need for a coordinating or linking role to see that the necessary services are brought together and are available to teenagers before and after the onset of pregnancy. This bill should concentrate on that role and the part the federal Government plays in it.
2. We do not believe that this Bill should seek to fund the major part of teenage pregnancy. Such funds should come from established sources - federal, state and local. However, funds should be available for seed money or start up costs to get new services underway.
3. We recommend that the Bill provide for the development of educational materials and the training of educators as well as providers of services by organizations with some established expertise.

H.R. 12146-Statement of Clyde E. Shorey, Jr.
Page 2

4. We recommend that the Bill provide:

- a. For an advisory committee to consult with the Secretary on the issuance of regulations for the Program and to participate in an evaluation after several years of operation.
- b. Requirements for maintenance of effort by states and local government.

You have heard testimony concerning Prevention as applied to H.R. 12146-that is preventing the pregnancy from occurring. I would ask you to focus for a few moments on one of the principal beneficiaries of this Bill, the unborn and newborn infant. With the focus on the infant, prevention takes on a new meaning and applies to the most important preventive health care in any person's life - prenatal and immediate postnatal care.

Birth defects are the nation's major child health problem. ~~Some quarter-million infants are affected every year by mental or physical handicaps that deny them an equal chance to live full, productive lives. Many of these infants die before their first birthday.~~

Adolescents bear nearly 600,000 babies each year - one-fifth of the nation's births. Half are illegitimate. The youngest of these teenagers, 17 and under, have the highest rate of any age group of dead or damaged babies.

Low birthweight, our most common birth defect, is prevalent among babies of teenage mothers and substantially greater as a percentage of births than at any other age. Low birthweight is the cause of the greatest number of deaths in the first year of life, and the major cause of disability in childhood. Brain damage

H.R. 12146--Statement of Clyde E. Shorey, Jr.
Page 3

or learning disabilities, often accompanied by emotional and behavioral problems, and structural defects can be a lifetime burden for a baby born too small or too soon.

While prenatal care is not the only influence on birthweight, its importance is obvious wherever data on the outcome of pregnancy have been examined. The results were especially revealing for teenage mothers. A study in New York City showed that among teenagers whose pregnancies were not at either social or medical risk, low weight ratios varied from 5.5 percent for those who began care in the first trimester, to 8.5 percent when care started in the second and third trimesters, to 9.9 percent for mothers who had no prenatal care at all. Among teenage mothers with high risk pregnancies, the low weight ratios also reflected the influence of prenatal care, varying from 15.4 percent of births for those whose medical care began in the first trimester, to 23.1 percent among mothers who had no care at all.

It is primarily the lack of early, continuous prenatal care including adequate nutrition that results in the higher incidence among mothers of this age group of iron deficiency anemia, hypertension, toxemia, and premature or prolonged labor. In turn, these conditions threaten her baby with greater incidence of mental retardation, physical malformations, and early infant death.

In 1975, some 280,000 teenage mothers in this country either had late prenatal care or had no care at all during pregnancy.

Shame, fear of parental reaction, lack of knowledge of where to get services, lack of funds, or the simple fact that a young girl does not realize she is having a baby, are common reasons

H.R. 12146-Statement of Clyde E. Shorey, Jr.
Page 4

why she does not seek medical help early enough. The relationship between prenatal care and maternal/infant health has been amply demonstrated.

While prenatal health care is only one Part of the total services to be brought together by this Bill, it is one of major importance. It must be coordinated with the other services for maximum effect Particularly for the newborn infant. Even though the major focus of the March of Dimes is the health of the newborn, we are fully aware that the full range of social, economic and educational services must be brought together for mother and child to assure the newborn any kind of a decent start in life. For this child, a life begun in poverty often continues in poverty and a cruel cycle is perpetuated.

Because of the devastating effects that teenage pregnancy can have on young lives, the March of Dimes has given top priority to the problem of "children having children". Together with national and local leaders in the health, educational and social service fields, we are working to change this dilemma that denies society the potential strengths of these mothers and babies.

Throughout its network of chapters, March of Dimes representatives --staff and volunteers-- collaborate with other organizations in focusing public attention on the concerns of adolescent pregnancy. To stimulate development and expansion of programs fitting community needs, the March of Dimes, as part of this collaboration, has funded health education and prenatal care grants in recent years in an effort to bring together and coordinate services to the high-risk pregnant teenager.

Here are some examples:

H.R. 12146-Statement of Clyde E. Shorey, Jr.
Page 5

A comprehensive teenage obstetrical program at Truman Medical Center, in Kansas City, Missouri;

Salaries and travel assistance for a nurse educator and health educator at the Student-Parent Center for Infants in Ann Arbor, Michigan;

Salary assistance for personnel to conduct a health education program for pregnant students in the School District of Pontiac, Michigan;

Providing salary for a registered nurse to work as health educator with the Young Mothers Program of the San Jose Unified School District in California;

Enabling the Montgomery County Health District, in Dayton, Ohio, to provide maternal health service to adolescents through counseling and teaching. Program emphasis has been on prenatal care, good nutrition, and an understanding of the adolescent's role as a mother in caring for her child's mental, social and physical growth.

Assisting a bilingual health education program for non-pregnant, pregnant, and newly delivered Spanish-speaking teenagers at the Martin Luther King, Jr. General Hospital, in Los Angeles;

Conducting a comprehensive school-age parent education program at Boston Hospital for Women. This is a multidisciplinary, demonstration program in counseling, medical care, day care, and parenting/consumer education;

Defraying salary costs for the Appalachian District Health Department, in Boone, North Carolina, for educational and supportive services in a six-county area;

Salary allocation to Methodist Hospital of Gary, Indiana, for a nurse educator to develop and teach prenatal care courses;

H.R. 12146-Statement of Clyde E. Shorey, Jr.
Page 6

Defraying salary costs of a nurse-educator at Baroness Erlanger Hospital in Chattanooga, Tennessee, serving an obstetrical clinic with many teenage patients;

Providing assistance to the Bradley-Cleveland Community Services Agency in Cleveland, Tennessee, for prenatal care and parenting instruction;

Offering health care, schooling and counseling services at the Margaret Hudson Program for School-Age Parents in Tulsa, Oklahoma;

Providing a grant to Brooklyn Jewish Hospital in New York City for a family health worker at a neighborhood center;

Providing a grant to assist in education for school-age mothers and fathers at the New Futures School in Albuquerque, New Mexico. New Futures provides a broad range of services to adolescent parents throughout the state.

In each instance the March of Dimes grant provided the essential element that made it possible for existing services to expand to cover more of the teenage pregnancy requirements of that community. These grants were made in all types of communities, large and small, urban and rural. The March of Dimes has demonstrated that, with small seed money grants, services can be expanded and coordinated in most any community. We believe that through H.R. 12146 the federal Government can accomplish this same objective on a nationwide basis.

We also believe we have demonstrated that someone must take the initiative to see that this coordination of services gets started in each community. It is essential that local governmental units be brought into the planning and funding of appropriate services. In Columbus, Ohio, the March of Dimes Chapter through a small grant and

H.R. 12146-Statement of Clyde E. Shorey, Jr.
Page 7

the marshalling of community concern secured the support of the City of Columbus and the Board of Education for a special program for pregnant adolescents at the Bethune Center. The Center provides, or makes referral to, a full range of comprehensive services as proposed in this Bill.

While we will continue to seek to play a similar role in as many communities as possible, we believe that the role of federal government should be to see that the coordination process is initiated in every community. The federal role need not be involved in working out the detailed plan but should see that the process gets started and have the responsibility to monitor progress toward the establishment and implementation of a plan. We do not believe that the total responsibility for starting the program should be left to the initiative of others.

~~You have~~ already heard testimony urging you not to consider H.R. 12146 as the principal source for funding of services. This was specifically referred to with regard to family planning services where the major funding comes from Title X of the Public Health Service Act. We believe this should apply to substantially all other services as well. Maternal and child health services, including prenatal and newborn care, are primarily funded from Medicaid, EPSDT, Title V of the Social Security Act and Community Health Centers as well as various state programs. In order to provide the funding for prenatal and immediate postnatal care to teenage mothers it is much more important for Congress to adopt the amendment to Medicaid as proposed in the President's Budget allocating \$118 million for prenatal and postnatal care for all low income women. Such an

H.R. 12146-Statement of Clyde E. Shorey, Jr.
Page 8

amendment to the Medicaid Act is currently being considered in the House of Representatives and should go to the Senate in the near future. It is estimated that of the \$118 million, \$18 million would apply to services for teenagers. We urge the Senate to Pass such an amendment to Medicaid.

The importance of H.R. 12146 is its coordination function. It should be used primarily for this purpose with sufficient funds available for seed money or start up costs where they are particularly useful in bringing services together to focus on the teenage problem. We believe that sufficient funds should be used to assure the exercise of the federal role to see that the coordination process is carried out in every community. However, in order to be able to pay start up costs for certain new services which may amount to more than 50 percent of those particular services, we urge the deletion of the words "any part of" in Section 102(e).

One element that appears to be overlooked in the Bill is the development of materials for, and the training of, educators as well as providers of services for adolescents. One of the most important roles we believe the March of Dimes has had to play in seeking to have a positive effect on the problem has been the development of teaching materials and guides and the sponsorship of in-service training programs for educators and other providers.

Some examples are:

Collaboration with the Center for the Family of the American Home Economics Association and the funding of teams of university teachers in family life education, nutrition, and child growth and development. These teams worked with schools and colleges in their

N.R. 12146-Statement of Clyde E. Shorey, Jr.
Page 9

regions to upgrade studies in these fields. We also funded a curriculum reader on family life education for grades 5 through 12;

Sponsored in New York City 9 weekly and in metropolitan Chicago 13 weekly in-service training programs for elementary and high school teachers on Parenting Priorities;

Cosponsored with the Junior League and the PTA in Topeka, Kansas and with the Junior League in Boston conferences for providers of services to pregnant teenagers.

Of major importance, and now with national scope, is the joint collaboration between the March of Dimes and The National Congress of Parents and Teachers entitled, "Parenting - PTA Priority". The March of Dimes has funded 17 regional conferences which reached all 50 states and our troops in Europe. The goal of this program is to strengthen family life by upgrading preparenthood education in elementary and secondary schools. Each conference involved teams of parent leaders, school administrators, teachers and school nurses. The subject matter covers many parts of a comprehensive program - maternal and infant health care, nutrition, genetics, family life education, parenting skills and responsibilities, and educational techniques. The success of the regional conferences has now led to a series of metropolitan conferences in many of the major cities.

The March of Dimes has sponsored and funded the development of two sets of special educational materials particularly applicable to teenagers that can be incorporated into the school curriculum. One, prepared by Bank Street College of Education in New York City, focuses on maternal health care and nutrition in pregnancy. The other, prepared by Educational Development Center of Cambridge,

H.R. 12146-Statement of Clyde S. Shorey, Jr.
Page 10

Massachusetts, covers adolescent sexuality and choices about pregnancy, the experience of pregnancy and parenthood, responsibilities of parenthood, and birth defects and their impact on parents and society. While both are brand new they have been received by the educational community with great enthusiasm.

It is especially important to point out that the Educational Development Center materials apply both to the problems of primary prevention of pregnancy as well as to the problems of preventive health care for the teenage mother and her baby. It is our belief that education at the proper time and through appropriate techniques relating to sexuality, pregnancy, and responsibilities of parenthood can have an important impact on reducing the number of pregnancies among teenagers.

We recommend that this Bill, H.R. 12146, provide for the development of new educational materials, the utilization of existing educational materials such as those developed by the March of Dimes and others and the training of educators as well as service providers in appropriate techniques for dealing with the problems of adolescent pregnancy. The restrictions of Section 102(a)(6) should not be so broad as to prevent the utilization of materials and provision of training to educators and providers by organizations such as the PTA, American Home Economics Association, Bank Street College of Education, Educational Development Center or the March of Dimes.

We wish to support recommendations made by others that the Bill provide for an advisory committee of professionals, and representatives of the teenagers, state and local governmental units and voluntary organizations, who have competence through training and experience to make recommendations to the Secretary on the administration of the

H.R. 12146-Statement of Clyde E. Shorey, Jr.
Page 11

program. These recommendations should specifically be directed to, among others, the issuance of regulations and the evaluation process.

We also support the recommendation for maintenance of effort by state and local governments. This is the only way that Section 103 (a) (5), requiring the program to make use of all other available funds, including state and local funds, can be effective. Maintenance of effort is essential if the federal role is to be primarily one of coordination and seeking to develop new programs from other federal, state and local sources and existing community institutions.

The March of Dimes supports the basic concepts of H.R. 12146. We believe that passage of such a bill with the recommendations we have suggested may be the best way to launch a nationwide attack on the problems of teenage pregnancy. We urge your support.

I wish to thank the Committee for the opportunity to present this statement on behalf of the March of Dimes.



ASSOCIATES FOR RENEWAL IN EDUCATION, INC./1101 FIFTEENTH ST., N.W. SUITE 11-06/WASHINGTON D.C. 20005/(202)331-1707

BOARD OF DIRECTORS

Gilbert E. DeLorme, Jr.
Chairman
Karl Mathiesen, III
Treasurer
Ronald Wertheim
Secretary
Brenda Strong Nixon
Assistant Secretary
Irene O. Baker
Luke Bandle
Dr. Irvin D. Gordy
Dr. Douglas Lutz
Donald Mauney
Florence McKenzie
Dr. Jesse Ulin
Dr. James Van Dlen
Jack White

ADVISORY BOARD

Dr. James P. Comer
Joseph Fossatiore
Dr. Robert Leco

PROJECTS

The Advisory &
Learning Exchange
The Young Washingtonians
Artist-in-Residence
D.C. History
Curriculum Project
The Cities Program
Parent Focus
Summer Reading Institute

TESTIMONY OF ASSOCIATES FOR RENEWAL IN EDUCATION, INC.

ON
H. 12146

Adolescent Health Services and Pregnancy Prevention, and Care Act of 1978

Submitted to:

Subcommittee on Select Education
Committee on Education and Labor
U.S. House of Representatives

Submitted by:

Lana D. Smith
Director, Parent Focus
Associates for Renewal in Education, Inc.

July 24, 1978.

Associates for Renewal in Education, Inc. is a private non-profit organization, committed to the improvement of education and the delivery of human services in The District of Columbia. Associates for Renewal in Education, Inc. believes that linkage of services and inter-agency cooperation is a key to the development of comprehensive approaches to the solution of social problems. As the attached Statement of Capability bears out, Associates for Renewal in Education, Inc. has, since its inception in 1971, facilitated and implemented many educational efforts in the District of Columbia in close cooperation with the District of Columbia Public Schools, District of Columbia Department of Human Resources, and other local public and private agencies, aimed at improving the quality of education of children and youth within the realm of the schools, the community, and the home.

Since 1976, one of Associates for Renewal in Education, Inc.'s projects, Parent Focus, has been dedicated to meeting the multi-disciplinary needs of school-age parents and their children in the District of Columbia where services to pregnant adolescents and adolescent mothers have been haphazard, scattered, and often non-existent since the close, in 1972, of the federally funded Webster School for Girls.

Statistics bear out the District of Columbia's critical need for health, educational, and social services to adolescents at risk of pregnancy, pregnant adolescents and adolescent parents and their families. In 1977, one out of every four live births was to a

teenager. Teenagers account for the majority of out-of-wedlock births and for the majority of abortions. The District of Columbia has a long history of high maternal and infant mortality. In 1976, the District's infant mortality rate (26) was the highest in the country both as a city and as a state. It remains almost twice as high as the national rate (14).

In the District of Columbia where 1 out of every 3 women 15-19 years old becomes pregnant, Parent Focus has developed the following, in close cooperation with the District of Columbia Public Schools:

1. The S.T.A.Y. (School-To-Aid-Youth) Parent-Child Center for adolescent parents and their children. S.T.A.Y. is an alternative District of Columbia Public School with city-wide enrollment. The Parent-Child Center offers a comprehensive parenting program including courses in Parenting and child growth and development, and nutrition, child care through an infant nursery and a pre-school center, and rap sessions for parents and non-parents. Its unique feature is that it was conceived, designed, and is operated with the full participation of young parents resulting in an on-going involvement of young fathers and young mothers.
2. A parenting curriculum designed specifically for teenage parents.
3. The only existing staff development curriculum designed for training District of Columbia Public Schools personnel who work with expectant teenagers or teenage parents; The

curriculum focuses on improving school personnel communication skills with young people on the issue of sexuality and on linking the adolescent to existing neighborhood and community services.

In the process of developing these training programs and the S.T.A.Y. Parent-Child Center, Parent Focus has become deeply aware of the necessity to link educational, health, and social services at the community level in meeting the complex needs of adolescents at risk of pregnancy, pregnant adolescents and adolescent parents, their children, and families.

In an effort to develop this inter-agency linkage, Parent Focus established in January 1977, with the technical assistance of the National Alliance Concerned With School-Age Parents, a city-wide task force representing multi-disciplinary professionals from public and private agencies, parents and youth. The District of Columbia Task Force on Adolescent Sexuality and Parenting is committed to raising the level of community awareness regarding adolescent sexuality and parenting, linking existing health, educational and social services in the community and providing technical assistance at the local level. Separate testimony on H.12146 has been submitted by the District of Columbia Task Force on Adolescent Sexuality and Parenting.

In light of the critical and imminent health, educational, and economic problems associated with teenage pregnancy and parenting, Parent Focus supports H.12146 for its overall goal in wanting to improve services and service delivery to pregnant adolescents and adolescent parents and their children.

We are concerned, however, with the vague objectives of H.12146, the lack of criteria by which priorities will be developed in meeting the needs of pregnant adolescents and adolescent parents, and the bill's strong emphasis on health services with only secondary priority to education and social services. The assumption that health services alone can reduce the costly risks associated with teenage pregnancy is erroneous. In the District of Columbia where minors are entitled to the full range of reproductive services, where sex education is mandated in the District of Columbia Public Schools curricula, teenage women 10-19 years old account for 25% of all pregnancies. It has been Parent Focus' experience that parenting education, infant care, job counseling and other educational and social services which enable young men and women to finish school and gain employment are often stronger determinants to postponing pregnancy than birth control information and the availability of contraceptives.

We strongly recommend, therefore, that the levels of funding for this legislation be increased in subsequent years. We feel that given the very limited funding H.12146 is requesting, the bill is overly ambitious in addressing primary prevention and treatment programs. While age-appropriate health, educational, and social service needs are very real, it seems unrealistic to expect a \$60 million appropriation to respond significantly to all these needs.

Moreover, while the bill stresses prevention, it makes no provision for the direction of some services to pre-adolescents. Parent Focus' experience in working with adolescents, has been that primary prevention of unintentional pregnancies is predicated on the education and knowledge of the young person Prior to and during that stage of development when a young woman is at risk of pregnancy and a young man at risk of becoming a father. Such education should focus on the health, educational, economic, and social responsibilities of parenting.

It is therefore Parent Focus' recommendation that H.1214 focus on the educational, health, and social services to pregnant adolescents and adolescent parents and their children and families.

Parent Focus views H.12146 as a valuable beginning effort to meet the multi-disciplinary needs of this adolescent population. We would like, however, to raise three major concerns we have with the bill in light of our experience in linking community agencies in the delivery of human services, specifically regarding the adolescent population.

1. Item 24 of Section 103 of the bill pre-supposes the existence of adequate educational, health, and social services geared to adolescent parents at the community level. Nothing could be further from the truth. As the National Directory of Services to School-Age Parents compiled by the National Alliance Concerned with School-Age Parents in 1976, indicates, services to this population are scattered, understaffed, underfunded with crisis-oriented, short term goals. Age-appropriate birth control counseling, pre-natal care, medical

care at delivery, pediatric care and parenting programs, which take into account the particular characteristics of an adolescent's physical, psycho-social, and intellectual needs and capabilities, are exceptions. Age-appropriate parenting services incorporating health, educational, and social services, have yet to be developed. Adolescent medicine is a new word in the health vocabulary, recognition of sexuality as an integral component of human development is a concept formal education and service agencies are struggling to understand and are often unwilling to incorporate in their service delivery philosophy. A case in point is the District of Columbia where with the close of the federally funded Webster School for Girls in 1972, age-appropriate educational, health, and social services regarding adolescent sexuality and parenting, are few indeed even though the Superintendent of District of Columbia Public Schools mandated in 1973 to the six school regions to provide the support services heretofore made available to Webster. Thus Parent Focus recommends with regard to Item e, Section 102, increasing the proposed 50% level of funding, allotted for the delivery of direct services, to 75%. Linkage of services cannot be effected where services do not exist. Adolescent services are often most absent in communities with the highest incidence of teenage pregnancy.

2. Parent Focus' second major concern regards Item 6 of Section 102 of the bill which excludes funding support for institutional training or training and assistance provided by consultants. One of Associates for Renewal in Education, Inc.'s major objectives, implemented successfully since 1971, has been staff development for educators, health and social service providers and administrators. Associates for Renewal in Education, Inc. draws on consultants with special expertise from both institutions and community agencies, to design and implement intensive short-term and long range training. Training offered by Associates for Renewal in Education, Inc. earns graduate credit from Trinity College. Associates for Renewal in Education, Inc. has found that institutional credit which necessitates approval of the training model and the instructor's expertise by the post-secondary institution is a strong incentive to prospective training participants. Such training provides for quality control, continuity, and a linkage between needs assessment and training programs. We recommend that H.12146 be revised to include institutional training and training provided by consultants with expertise in adolescent health, education, and service delivery.

Parent Focus would like to raise issue with Item 6b of Section 102 in that it fails to mention day care and specifically infant care as a service H.12146 is concerned

in providing. It has been Parent Focus' experience in the District of Columbia that the major cause for adolescent mothers dropping out of school is lack of school-based or community-based infant care. Moreover, ParentsFocus has witnessed the multiple benefits that the provision of infant care can have in helping adolescent parents cope positively with the responsibility of parenting and grow as individuals and as parents. The development of a comprehensive parenting program in the Parent-Child Center at S.T.A.Y. was a direct outgrowth of the provision of basic child care for infants, toddlers, and pre-schoolers of students enrolled at S.T.A.Y. If H12146 is concerned with assisting pregnant adolescents and adolescent parents to become productive and independent contributors to family and community life (Item 1b, Section 102), it is necessarily concerned with the adolescent's completion of education and parenting skills. If the bill is concerned with reducing the high school drop out rate of adolescent parents and improving the quality of their parenting, it must address the provision of school and neighborhood-based infant care. Finally, Parent Focus would like to offer the three following recommendations regarding the REQUIREMENTS FOR GRANT APPROVAL.

1. Item 10 of Section 104 requests a community testimony by public agencies for the need of services. We feel this request defeats the overall purpose of H.12146 in that communities with the greatest need and those who have not developed a statistically reliable profile of that need, would be ineligible. The District of

Columbia is a case in point. Data on reported terminations of pregnancy (live births, abortions, miscarriages) by age and residency have been compiled only since 1975; much of it is still unpublished data. Parent Focus recommends that communities lacking hard reliable statistical data from public agencies be allowed in lieu of the testimony to develop a statement of need by a community advisory council representing multi-disciplinary public and private agencies, parents and adolescents, and a description of the criteria and procedures by which such a council was recruited.

2. Title II, Item 5c, Section 201 entitles the Secretary to set aside no more than 1% of funds appropriated for evaluation. Parent Focus feels this is an extremely limited allocation. Development of cost effective adolescent health programs must be predicated on a reliable knowledge base of intervention programs. To date that knowledge base has been very thin. Intervention programs have mushroomed across the country with no guidelines or criteria, due in large part to the absence of evaluation of these programs.

3. Item 11b of Section 104, requests grantees to include in their report, the impact the project has on reducing the rate of first and repeat pregnancies. While Parent Focus supports fully the objective of

to reduce the rate of such pregnancies, we question the impact which a project funded for less than 3-5 years, can have on reducing in an accountable manner, such pregnancies, in view of the nine month duration of pregnancy.

Finally, we recommend the establishment of an Advisory Council including representation of service providers to advise HEW and to insure that the \$60 million have a maximum impact on the problems associated with adolescent pregnancy and parenting.

In conclusion, Parent Focus of Associates for Renewal in Education, Inc. wishes to reiterate its support of H.12146, and offers its expertise in providing efforts which address the very complex and multi-disciplinary needs of pregnant adolescent and adolescent parents.

Advisory & Learning Exchange

1101 16th Street, N.W., Washington, D.C. 20036 • (202) 672-1220

January-February 1978

Vol. VI, No. 1

Reflections...

By: Lana D. Smith
Director, Parent Focus

Teenage pregnancy and parenting are major national problems today which cut across many communities. Ours is no exception.

The problem of teenage fertility is one of complex dimensions. It defies social categorization and cuts across economic and ethnic lines. Teenage pregnancy is an every day occurrence in urban, suburban and rural communities today. Its consequences are high health, educational and economic risks for the young mother and child, and deep familial cross-generational crisis for the families involved.

Statistics underscore the reality of the problem. The United States has one of the highest teenage fertility rates in the world. In a recent comparative study of twenty-two industrialized nations, the U.S. ranked the third highest. The Alan Guttmacher Institute indicates that not only are some 11 million teenagers sexually active today, but that adolescents are becoming sexually active at an earlier age, e.g., one fifth of 13 and 14 year old boys and girls are sexually active. In the U.S. nearly one million teenagers (ages 9 to 19) become pregnant every year. One third of these pregnancies are terminated in abortions while some 600,000 adolescents gave birth. Two-thirds of these pregnancies are unintended.

While fertility rates have declined significantly for women in their twenties and leveled off for 18 and 19 year old women, they have increased for younger teenagers. A study by the Population Reference Bureau indicates that "from 1970 to 1974 births for 14-year-olds climbed 91". Some 30,000 girls under 15 years of age become pregnant every year, and of these some 13,000 give birth. Nine out of ten teenage mothers keep their babies. Seven out of ten mothers under 15 get no pre-natal care during the first trimester and 25% do not get any pre-natal care at all.

The incidence of health risks are twice as high for mothers under 15 and their infants than for mothers in their twenties. As the age of the mother declines, infant mortality, low birth weight, cerebral palsy, mental retardation and birth defects for the infant increase. Young teenagers run a 60% higher risk of death or serious complications resulting from pregnancy e.g., toxemia, anemia, prolonged labor than mothers in their twenties.

Educational and economic risks are very real too. Pregnancy is the most common cause for girls to drop out of school. For those who become mothers while in junior high, nine out of ten do not complete their high school education and four out of ten never complete the eighth grade. A study in New York City found that 85% of those who became mothers between the ages of 15 and 17 did not graduate from high school and nine out of ten were unemployed. The risk of poverty is three times as high for women who become mothers before age 15.

The lack of day care services for infants reduces even further the likelihood of the young mother completing her education. The majority of day care services across the country do not enroll children under two years of age.

The complexity and the dimensions of the problem demand a holistic approach to its solution. Yet to date, the nation's attempt to deal with the problem has been at best piecemeal. As the number of young pregnant teenagers has increased and the incidence of adolescent mothers keeping their babies has grown, schools, neighborhood clinics and social services in individual communities have tried to respond. The grassroots response to the crisis has resulted in "some delivery of some service in some 1500 communities". According to the National Alliance Concerned With School-Age Parents, the only national organization impacting on the problem, these services are "inadequate underfunded and designed to achieve only short term goals". Birth control counseling, abortion counseling, family planning counseling for young men are more often the exception than the rule. Pre-natal care to insure a positive pregnancy outcome, medical care at delivery and pediatric and post-partum care are also exceptions.

Human sexuality is still a controversial term in many schools and communities, and much too often equated with the term "sex" by both teachers and parents. The result is that family life education and sex education have lagged behind. Only six states and the District of Columbia mandate the teaching of health education and sex education in the curriculum.

Reduction of teenage pregnancy and of the risks which accompany teenage childbearing, can only be realized through a national comprehensive policy on adolescent health which would mandate both prevention and remediation through the integration of health, educational and social services. Without a national policy and federal dollars, adolescent health remains a marginal issue. However, before meaningful national legislative action can be realistically initiated, a comprehensive understanding of the problem must be articulated through appropriate channels at the state and local levels first. Federal dollars when they are legislated will filter to communities who have defined a comprehensive approach to the problem.

The District of Columbia Task Force on Adolescent Sexuality and Parenting represents the beginning of such a comprehensive approach. The Task Force whose members represent multi-disciplinary agencies, was formed last year to impact on the problem of teenage pregnancy and childbearing in the District. Its members represent D.C. Department of Human Resources, the D.C. Public Schools, the D.C. Medical Society, Howard University Hospital and Howard University School of Medicine, Washington Metropolitan Sex Coalition, Big Sisters of the Washington Metropolitan Area, the American Red Cross, the D.C. Council, the Institute for Urban Affairs and Research, D.C. Commission on the Status of Women, the Home & School Institute and Hillcrest Clinic.

One of the Task Force's primary goals is to facilitate the delivery of comprehensive services to sexually active young people in our community by promoting public awareness and stimulating action concerning adolescent sexuality and parenting on behalf of the community citizenry, professionals and policy makers.

As an initial assessment of services in the District, the Task Force has completed during the last year, a review of existing policy and policy implementation regarding adolescent sexuality and parenting in the schools, the health services and the social services provided by the Department of Human Resources. These reviews are included in this issue of the newsletter.

The most significant gap that this policy review reveals lies between the existence of services to sexually active adolescents in schools, DHR and the health services and the lack of inter-agency communication and coordination to make these services more readily available to young people. Respective agencies often do not give high visibility to these services thus short-changing the adolescent who does not know what services to seek nor where.

In requiring both health and sex education in the school curriculum, the District is years ahead of 27 states who mandate only health education (but no sex education), and light years ahead of 17 states who do not mandate either health or sex education. Minors in D.C. have access to contraceptive services without parental consent and the right to pregnancy related care. Infant day care is available free, to the young mother enrolled as a full time student in day school; through DHR's Day Care Division. Pre-natal through post-partum care geared to adolescents and pediatric care for infants is available at the Howard University Adolescent Clinic. Family planning and birth control clinics are scattered throughout the four quadrants of the city. School-based centers for adolescent parents are operating in three regions, and one school has an infant nursery and a pre-school center.

What is needed now is a cooperative, joint effort by respective institutions and agencies in the city to implement:

- improved training of personnel to communicate effectively with children and adolescents about human sexuality.
- a more concerted effort on behalf of agencies to provide birth control information and services to young teenagers.
- a delivery of more comprehensive services to expectant teenagers, young mothers and fathers and their children.

We invite you to join the Task Force. We need your participation and support in order to impact on the problem. We must act quickly and cooperatively before adolescent pregnancy becomes a symptom of adolescence for our youth.

FACTS ABOUT THE SERVICES PROVIDED THROUGH THE DISTRICT OF COLUMBIA

As outlined in various pamphlets to actually advise adolescents, pregnant teenagers and adolescent parents by hospitals, private agencies and District of Columbia Department of Human Resources clinics, is shown on the chart "Your Fertility Services" on this next page.

Specifically speaking the pregnant adolescent is caught in a no-win's land. The state of adolescence prescribes that she be seen by a pediatrician, her state of pregnancy prescribes that she be under the care of an OB/GYN doctor.

The fact here is that the adolescent needs to see a health services to and for adolescents, a place where adolescents receive medical care through an adolescent clinic, are few and far between. The only hospitals who have an adolescent clinic are Children's Hospital, Howard Hughes City Hospital, Children's Hospital, and Army Medical Center and Providence Hospital. These clinics provide family planning services, recognizing that adolescent needs in this area are different from those of adults. Some of these clinics offer pre-natal through post-natal care. Although the D.C. Department of Human Resources does not operate adolescent clinics, pregnant girls are seen separately from adults. Four hospitals do not provide any family-planning services. They are: Greater Southeast Hospital, Jackson's Hospital, Roger's Memorial Hospital and Silver Hospital. In the District of Columbia, a woman can obtain family planning counseling and birth control without parental consent.

YOUR FERTILITY SERVICES IN THE DISTRICT OF COLUMBIA

FACILITY	Do You Provide the following										Counseling									
	Fertility services for		Birth control methods		Pregnancy testing		Abortion		VD Testing		VD Treatment		Post-natal care		Pediatric care		Birth control			
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Georgetown																				
George Washington																				
Washington, D.C.																				
Columbia																				
Children's																				
Providence																				
Howard Hughes																				
D.C. General																				
Howard Univ.																				
Georgetown																				
Howard's Hosp.																				
Roger's Mem.																				
Silver Hosp.																				
St. Elizabeth																				
Howard Univ.																				
Providence																				
Providence																				

1. Does not insert IUD's

2. Only does on request of patient

3. Just for Georgetown

4. Full only

5. Not at all

6. Avail for service when stationed at W.H.

7. Baby to teen mother becoming

8. Privacy patient because of

9. Voluntary independent cases

10. Voluntary independent cases

11. Post natal and post-natal care

12. Only if patient's doctor is on staff

13. For pregnant patients only who go through complete pro.

14. Not at all

15. Just for Georgetown

16. Available to pregnant

17. Testing children's

18. Not at all

19. Not at all

20. Not at all

Community Resources

ATTENTION: Teachers, Parents & Students

TIPS FOR SAFE SLEEPING

This handy memo put to available from the Community Relations Department of the Montgomery County Police Dept. of Charge. Read and share this emergency information on the side and the following tips on the other:

- Check all outside doors before parents leave. Lock them.
- Check each child's name and age. Also the nearest outside door to their room in case of slip.
- Ask any individual you should know about each child. How he used to; what medicine, what time, etc.
- Take a flashlight with you. You don't have when you are in a strange house if the lights go out.

- Do not let anyone in the house or near the door if you don't know the caller. Make sure your parents know where you are and the telephone number.
- Do not make personal phone calls. Use the phone available if the parents have to call home.
- In circumstances that require your supervision, CALL THE POLICE 911.
- Tell the parents of any unusual incidents while they were out.
- When the parents return home, accept contact to see how at planned. However, if a parent is to drive you home but appears to be intoxicated, insist on calling your own parents.

To get your free-copy call 762-7267.



...scent pregnancy itself nor the need for legislation, which is the critical issue facing the Subcommittee. "Is H.R. 12146 a sufficiently constructive and clearly defined legislative response to the problem of adolescent pregnancy?" We believe it is not and should be revised.

Inadequacies of H.R. 12146

The bill is vague in defining its relationship to existing federal programs, the population it seeks to serve, the objectives it seeks to achieve, and the priorities it sets for funding:

1. Relationship to other programs. Although the Administration has emphasized the importance of linkage and coordination of programs, H.R. 12146 does not define its relationship to existing federal programs which provide support for services to adolescents or have the potential for service support.

2. Target population. The bill seeks to serve, without making any distinction among them, not only an enormous population - 21 million teenagers ages 15 to 19 and 40 million ages 10 to 19 - but also an enormously diverse population: girls and boys; sexually experienced and sexually inexperienced individuals; youth who are still children and others who are really adults; and pregnant girls and young parents, some with more than one child.

3. Objectives. The bill establishes no more measurable objectives for HEW than pregnancy prevention, care for pregnant adolescents, and help for adolescents to become "productive independent contributors to family and community life."

4. Funding priorities. The bill offers support for a broad range of services which are often expensive to provide and do not exist in many communities.² Yet, it sets as priorities for funding only comprehensiveness, coordination, and service support in communities with a high incidence of adolescent pregnancy and low incomes.

As a result of its vagueness - its all-encompassing scope - H.R. 12146 would give HEW inadequate direction for the use of the limited resources it would authorize. The estimated costs of the services that would be eligible for funding only emphasize the inadequacy of direction for resource allocation.

For example, the costs of serving already pregnant teenagers alone would be considerable. Of the one million girls ages 15-19 who are estimated to become pregnant annually, 600,000 give birth and close to 90 percent keep their infants. According to HEW Secretary Joseph Califano in oral testimony to

the Senate Human Resources Committee on June 14, the costs of services per pregnant adolescent girl under this bill are estimated to be an average of \$750. This does not include the costs of the infant's delivery.

According to Dr. Janet Hardy, Director of the Johns Hopkins University Center for School-Age Mothers (cited by HEW as a model program) in oral comments to the House Select Committee on Population on March 2, the estimated annual cost of comprehensive services per pregnant girl under her program is \$2000, not including Medicaid/Medicare coverage for obstetrical services. Long term provision of a complete range of services for mother and child might cost an estimated \$5000 annually.

In other words, if HEW were to seek only to provide services for the 600,000 pregnant girls who deliver annually, the costs might range from \$450 million to \$3 billion just using these estimates. Clearly, both the \$60 million proposed under H.R. 12146 and the \$340 million HEW has requested for its entire package of adolescent pregnancy initiatives in fiscal 1979 fall far short. In ZPG's opinion, the bill does not give HEW either specific objectives or sufficient priorities to guide the use of the proposed funding.

Importance of Title X

The focus of the bill should be determined both by complementary federal programs already in place and the language of the legislation itself. We believe it is no longer useful to evaluate this need for direction in the context of the Administration's \$340 million budget request. One must also consider the changes Congress already has begun to make in that request.

Both the full Senate and the Interstate and Foreign Commerce Committee in the House have recommended substantial and long-term increases in funding under Title X of the Public Health Service Act, the major single source of federal funding for family planning services, with a special emphasis on serving teenagers. In the history of Title X, these actions represent steps toward a

major new commitment to the voluntary prevention of unwanted births - a commitment family planning supporters have advocated for several years.

ZPG specifically endorses the funding levels and range of Title X services approved by the Senate in S. 2252, which includes earmarked funding for programs serving adolescents. The wisdom of such an escalated federal investment in the prevention of adolescent pregnancies is borne out by the most recently published analyses of data on adolescent contraceptive use and premarital pregnancy.

Looking at nationwide survey data collected in 1976, researchers in the Department of Population Dynamics at Johns Hopkins University found a "strong negative correlation between contraceptive use and continuity of use and (adolescent) pregnancy: Fifty-eight percent of never users experienced a premarital pregnancy, compared to 24 percent of sometimes users and only 11 percent of always users.⁵ Today, of the estimated four million sexually active teenage girls ages 15 to 19, more than a million and a half still do not have access to medically prescribed contraceptive services.⁶

In responding to the problem of adolescent pregnancy, Congress should adopt the Title X provisions of S. 2252 and revise H.R. 12146 to build on this commitment to family planning services and education for all, including adolescents. H.R. 12146 should be revised clearly to begin to support more comprehensive services to meet the problems of pregnant adolescents and adolescent parents, who often experience additional and repeated unwanted pregnancies.⁷

According to current research, a quarter of teenage mothers, including married girls, experience a second pregnancy within one year of their first birth.⁸

Recommended Revisions in H.R. 12146

Four general changes in the bill would give it the direction its needs for such a goal - a goal which we believe is already inherent in HEW's initiatives:

1. Relationship to Title X. The "Findings and Purposes" section should be rewritten to state explicitly Congress' commitment to supporting family planning services under Title X of the Public Health Service Act and its intention that adolescent pregnancy should build on, not duplicate that program's efforts.⁹

2. Target population and objectives. While recognizing the number and variety of adolescents in need of different kinds of services, this bill should specify as its target population adolescents who are pregnant, adolescent parents, and their personal friends or relatives. As its objectives in serving those adolescents, the bill should seek to improve their options about pregnancy and childbirth, improve their health and their children's health, reduce the likelihood of repeat unwanted pregnancies, and improve their chances of completing their schooling and becoming self-supporting.¹⁰

3. Priorities for services. The bill should require applicants for funding to demonstrate the availability of a minimum core of services for early pregnancy detection, pregnancy options counseling, pre- and post-natal health care, and family planning counseling and services in order to qualify for a broader range of educational, social, and economic services.¹¹

4. Evaluation funding. Because of the dearth of research on the effectiveness of programs dealing with adolescent pregnancy, the bill in Sec. 201(c) should provide three percent of the funding instead of one percent for evaluation. In the report accompanying its approved bill, the Subcommittee should spell out its expectations for evaluation of nationwide trends, duplication of model programs, and innovative or experimental projects.

If the bill were given the clearly defined objectives and priorities these kinds of changes would accomplish, we believe it would be appropriate for the Subcommittee then to consider additional refining amendments which would further strengthen the bill.

1. Funding levels. Adolescent pregnancy is an ongoing problem with long-term effects. It will require an equally long-term response which should be demonstrated by earmarking funding for the second and third years authorized by the bill. ZPG supports authorizations of at least \$90 million for the second fiscal year and \$120 million for the third.

2. Ceiling on services funding. Studies by the National Alliance Concerned with School-Age Parents and researchers with the School of Public Health at the University of California, Berkeley, indicate that the major service problem in many communities is not lack of coordination or linkage but lack of services themselves.¹² Therefore, ZPG recommends that Sec. 102(e)'s 50 percent ceiling on funding of services be increased to 75 percent.

3. Maintenance of effort. Because of the need to build on existing resources - not only federal but also state and local - the bill should include a "maintenance of effort" requirement in a new Sec. 102(f).¹³

4. Advisory committee. Because of the complexity of the problems associated with adolescent pregnancy and the interest in encouraging innovative programs under this legislation, a new Sec. 201(a)(6) should be added to the bill to establish a multi-disciplinary advisory committee to advise HEW on rulemaking and evaluation requirements.¹⁴

5. Role of the DASPA. ZPG believes adolescent pregnancy is one of the most critical population problems facing HEW today. Departmental programs to respond to it should be coordinated under the Deputy Assistant Secretary for Population Affairs, the position mandated by Congress in the 1970 "Family Planning Services and Population Research Act," but temporarily eliminated as a full-time position by HEW last year. We recommend that the Subcommittee express its interest in seeing coordination of the adolescent pregnancy initiatives under the DASPA in communications with the Department and in report language.

Conclusion

In conclusion, ZPG believes the issues facing the Subcommittee are not whether there is an adolescent pregnancy problem but whether H.R. 12146 is adequate to deal with the problem; not whether comprehensive services should be provided under the bill but what is the bill's relationship to Title X of the Public Health Service Act and its funding priorities for services.

Footnotes

- 1 The research findings on the health, education, economic and social problems of adolescent pregnancy are summarized in the attached ZPG publication, "Teen-age Pregnancy: A Major Problem for Minors."
- 2 In their study, "Services for and Needs of Pregnant Teenagers in Large Cities of the United States," (PUBLIC HEALTH REPORTS - January/February, 1978), Hyman Goldstein and Helen M. Wallace of the University of California at Berkeley, found that only one in five of all pregnant adolescents needing special programs are accommodated under existing services. Janet Bell Forbush, Executive Director of the National Alliance Concerned with School-Age Parents, found in a survey of service providers around the country a "patchwork quilt" of services, which often would benefit more from their expansion than their coordination.
- 3 In its fiscal 1979 budget request, the Department of Health, Education and Welfare requested \$338 million for new and existing programs to deal with the problems of adolescent pregnancy. It represented a \$142 million increase over fiscal 1978. However, the only increase earmarked exclusively for family planning was \$18 million under Title X of the Public Health Service Act. And that represented only \$8 million in new monies and \$10 million transferred from programs serving older women. In addition to this funding and the \$60 million in new legislative authority, the Administration also requested increased monies under Medicaid and Title XX social service program reimbursements under the Social Security Act, maternal and child health care under Title V of the SSA, community health centers, health education, and research and training.
- 4 H.R. 12370, the "Health Services Amendments of 1978" reported out of the House Interstate and Foreign Commerce Committee in May would increase Title X funding for family planning service project grants from \$135 million in fiscal 1978 to \$200 million in fiscal 1979 and additional increases leading to \$264.5 million in fiscal 1981. The report accompanying the bill emphasizes serving teenagers. On June 7, the Senate passed S. 2252, the "Voluntary Family Planning Services, Population Research, and Sudden Infant Death Syndrome Amendments of 1978." It would provide \$216.5 million for project grants in fiscal 1979 increasing to \$598 million in fiscal 1983. This would include \$42.5 million earmarked for services for adolescents in fiscal 1979 increasing to \$183 million in fiscal 1983. The Senate bill also would authorize several million dollars for education and materials which the House bill does not provide.
- 5 Melvin Zelnik and John Kanther of the Department of Population Dynamics of Johns Hopkins University report on "Contraceptive Patterns and Premarital Pregnancy Among Women Aged 15-19 in 1976" in the May/June issue of FAMILY PLANNING PERSPECTIVES. According to their research, six percent of sexually active women using a medical method of contraception regularly risk pregnancy, 11 percent who use some form of contraception regularly, and 58 percent who never use contraception. It is estimated that if adolescents did not now use contraception, an additional 680,000 girls would experience premarital pregnancies annually, increasing the annual total to 1.46 million.
- 6 According to the Alan Guttmacher Institute, the research and policy affiliate of the Planned Parenthood Federation of America, in its May 1978 report "Contraceptive Services for Adolescents: United States, Each State and County, 1975," six out of ten sexually active adolescent girls ages 15-19 did not have access to medically prescribed contraceptives in 1975. Of

the four million sexually active girls in this age range, 1.2 million received services from organized clinics and 1.2 million received services from private physicians.

- 7 In a study of pregnant adolescents and their classmates in Baltimore from 1968 to 1972, Frank Furstenburg of the Center for Population Research at the University of Pennsylvania, found a substantial gap between the family size expectations and the actual family size of young women who became pregnant as teenagers. On the average, adolescent mothers in this inner-city study foresaw much smaller families than they later had within just five years. In his article, "The Social Consequences of Teenage Parenthood," (FAMILY PLANNING PERSPECTIVES, July/August 1976), Furstenburg reported that within five years of delivery of their first child, 30 percent of the adolescent mothers in the study had become pregnant again at least twice.
- 8 In 1976, Furstenburg (see #7) stated that most published studies show that at least one-half of adolescent mothers experience a second pregnancy within 36 months of delivery. According to Kantner and Zeinik (see #5), based on their research, 25.6 percent of adolescent mothers, including married girls, become pregnant within one year of their first birth. Larry Bumpass of the Center for Demography and Ecology at the University of Wisconsin in "Age and Marital Status at First Birth and the Pace of Subsequent Fertility," DEMOGRAPHY, February 1978, found a significant relationship between shorter birth intervals and earlier age at first birth. In its report, "11 Million Teenagers," the Alan Guttmacher Institute stated that married women who begin childbearing before they are 18 will have families 1.3 times larger than women who begin to have children at ages 20 to 24. The younger women expect a completed family of nearly four children compared to the family size expectation of less than three children among older women.
- 9 ZPG recommends a new Sec. 2(a)(7) and (8) to specify the relationship of H.R. 12146 to Title X: "(7) the Federal government has begun to provide support for family planning services for adolescents under Title X of the Public Health Service Act and to a lesser extent under Titles V, XIX, and XX of the Social Security Act; and (8) therefore, federal policy should continue and expand support for family planning services under Title X of the PHSA and Titles V, XIX, and XX under the SSA while providing support under this Act for comprehensive services for pregnant adolescents, adolescent parents and their immediate friends or relatives.
- 10 ZPG recommends rewriting Sec. 2(b) to read: (b) It is, therefore, the purpose of this Act:
 - (1) to support the linkage, expansion, improvement and creation of comprehensive, community-based services for pregnant adolescents and adolescent parents:
 - (A) have options about pregnancy and childbirth,
 - (B) have improved health for themselves and their infants, and
 - (C) experience fewer unintended repeat pregnancies;
 - (2) to support, in supplement to these core services, other educational, social, and health services which will help the target population:
 - (A) complete schooling,
 - (B) improve vocational opportunities, and

(C) reduce future welfare dependence; and

- (3) to support, in supplement to these core services, additional services or referral to services to assist the friends and relatives brought into programs serving pregnant adolescents and adolescent parents to prevent initial unwanted pregnancies.

(At the Johns Hopkins Center for School-Age Mothers, participants in the program are encouraged to bring friends or relatives with them to classes and counseling sessions; more than half do.)

11 ZPG's reasons for giving top priority to these services are:

- Early pregnancy detection is essential to begin pre-natal care during the first trimester of pregnancy as well as to enable girls to consider the option of abortion when it is safest to their health. According to the Goldstein/Wallace survey of special services in large urban areas for adolescents (see #2) only 45 percent provide pregnancy testing.
- Pregnancy options counseling should give the pregnant adolescent the objective information she needs to make a decision about the options open to her: to deliver and keep her infant; to deliver and place her infant for adoption, or to obtain an abortion. When she has information about all of these options, then the girl can make her own decision.
- Not only pre-natal health care, but also long-term post-natal health care are associated with reduced risk of mortality and improved health for both mother and infant.
- The Goldstein/Wallace study (see #2) found that ten other services are provided more frequently than contraception and five others are provided more frequently than sex education in special programs serving pregnant adolescents. Fifty-nine percent of the special programs reported by respondents to the survey provide contraceptive services.

12 As mentioned in #2, research indicates that shortage of services, not lack of service coordination, is the major problem in reaching adolescents.

13 ZPG recommends the addition of a "maintenance of effort" clause in a new Sec. 102(f): "These funds may not be used to replace funds currently being used either to provide direct services or to link services."

14 ZPG recommends the addition of a new Sec. 201(a)(6): "(6) appoint a multidisciplinary advisory committee, of no more than 20 people, which shall be composed primarily of persons experienced in providing services to sexually active youth and pregnant adolescents and adolescent parents. Other advisory committee members shall come from organizations and agencies having experience in such areas as policy-making and research as well as consumer services. The functions of the advisory committee shall include, but not be limited to, a consultative role in the development of regulations and of overall evaluation criteria.



1346 Connecticut Avenue NW Washington D.C. 20036

(202) 785 0100

ZPG'S VIEWS ON H.R. 12146 / S. 2910, THE ADOLESCENT HEALTH, SERVICES, AND PREGNANCY PREVENTION AND CARE ACT

An estimated four million adolescent girls and seven million adolescent boys are sexually active. Over a million girls ages 15 to 19 become pregnant each year. Of these, approximately 600,000 deliver, and more than ninety percent keep their babies. Many of these parents and children are destined to experience lifetimes of hardship in their health, education, economic and social well-being.

Because of its recognition of these problems, the Carter Administration has proposed a package of "adolescent pregnancy initiatives" to improve funding under existing HEW programs and to create new ones to serve teenagers. As part of the package, HEW submitted to Congress this spring the "Adolescent Health, Services, and Pregnancy Prevention and Care Act," which was introduced as H.R. 12146 and S. 2910.

This bill would authorize the Secretary of HEW to provide in fiscal 1979 \$60 million in grants and contracts for networks of comprehensive services - ranging from family planning and health care to education and vocational counseling - both to help teenagers avoid pregnancy and to cope with it and early parenthood.

As an organization whose members across the country support full availability of family planning information and services for all, including teenagers, ZPG has advocated increased federal funding for family planning services under Title X of the Public Health Service Act. This year, the Senate has voted major increases in this program as part of S. 2522, and the House Interstate and Foreign Commerce Committee has also supported improved Title X funding as part of H.R. 12370.

ZPG recommends that in acting on the adolescent pregnancy bill, Congress should pass the Senate's recommendations for Title X, which includes earmarked funding for community-based education and family planning services for teenagers, and rewrite H.R. 12146 / S. 2910 to clarify whom it will serve and what specifically it seeks to accomplish.

Attached is testimony on this legislation. ZPG was requested to prepare for the House Subcommittee on Health and the Environment. It recommends four general revisions of the Administration's bill to give it clear objectives and direction, which it now lacks:

1. Amend the "Findings and Purposes" section to state explicitly Congress' commitment to supporting family planning services under Title X and its intention that the teen pregnancy bill should build on, not duplicate, Title X.
2. Amend the bill to specify the teenagers it seeks to serve and the objectives it seeks to achieve which should be improved options on pregnancy, improved health, reduced chances of repeat unwanted pregnancies, and improved chances for completing school and becoming self-supporting.
3. Amend the bill to give priorities to funding, by requiring applicants to demonstrate the availability at a minimum of services for early pregnancy detection, pregnancy options counseling, pre- and post-natal health care, and family planning.
4. Increase the funding for program evaluation.

Teenage Pregnancy:

A Major Problem for Minors

Teenage pregnancy has reached epidemic proportions in the United States. Each year, more than one million teenagers become pregnant. In comparison, 24,374 Americans contracted measles and 59,647 had mumps in 1975, the most recent year for which statistics are available. By the age of 20, three in 10 American women have borne at least one child.

Early childbearing poses serious health, social, and economic consequences for teenage mothers and their children. In addition to facing higher health risks both for themselves and their children, teenage mothers are often forced to leave school and to forego job training and other opportunities for economic advancement. Unwanted mothers face social disapproval, financial hardship, and difficulty in finding work and child care facilities. If they marry, teenage mothers are more likely to have unstable marriages and financial problems than others of the same age and socio-economic status. Women who have their first child in their teen years tend to have more children in quicker succession than their peers.

In the past, pregnant teenagers were pressured to give married or have their babies secretly and put them up for adoption. In addition, they were routinely expelled from school. Today, teen mothers are asserting their right to an education, and special classes and programs have been started in many communities.

While older women's fertility has been declining during the past five years, teenagers aged 14 and younger have had in-

creasing numbers of children, and the fertility rate of teens aged 15-19 has remained about the same. The proportion of U.S. births attributed to teenagers has been increasing, one in five U.S. births is to a teenager. Also, the number of out-of-wedlock births to teenagers is rising; teenagers account for half of all out-of-wedlock births in the United States. Most teenage pregnancies are unwanted, as is indicated by the fact that one in three U.S. abortions is to a teenager.

Experts attribute the epidemic of teenage pregnancies to increased sexual activity, non-use or ineffective use of contraceptives, and lack of contraceptive information and services for teenagers. More than four million teenage women aged 15-19 are sexually active and at risk of unwanted pregnancy. Only half of them are currently receiving contraceptive services. Of the estimated 420,000 to 630,000 teenage females under 15 who are sexually active, only 7 percent are receiving contraceptive services, even though this age group is most vulnerable to health risks if they become pregnant.

Studies show that most teenagers seek contraceptive services after they have become sexually active, many of them come to clinics in need for pregnancy tests. Traditional sanctions against premarital sex have not kept teenagers celibate but rather appear to have contributed to the non-use and sporadic use of contraceptives as well as the tendency to select unreliable contraceptive methods.

Teenage Pregnancy—An Overview

Births to Teenagers

- Teenagers bear nearly one in five babies born in the United States; two-fifths of these births are out of wedlock and account for half the total out-of-wedlock births in the country.
- Three in 10 women aged 20 in 1975 had borne at least one child.

Pregnancy

- One in six teenage women who have premarital intercourse becomes pregnant.
- One in 10 teenage women aged 15-19 becomes pregnant each year.
- Six in 10 teenage pregnancies end in live births; nearly three in 10 are terminated by abortion, and one in 10 ends in miscarriage.
- Teenagers account for one-third of all legal abortions performed in the United States.

Health Risks

- The death rate from complications of pregnancy and childbirth is 13 percent greater for 15-19-year-olds and 60 percent greater for teenagers 14 or younger compared with women in their early 20's.
- Babies born to teenagers are two to three times more likely to die in their first year than babies born to women in their early 20's.

Contraception

- Only three in 10 sexually-active teenage women use contraception consistently.
- Among sexually-active teenage women who do not use contraceptives, seven in 10 think that they cannot become pregnant.
- The condom, withdrawal, and the Pili account for more than three-fourths of all contraceptive use among teenagers.
- Half of all sexually-active teenage women (about two million) are still not receiving family planning services from clinics or private physicians.

Teen Sexual Activity Increasing

More than half of the 21 million young people aged 15-19 are estimated to be sexually experienced—almost seven million young men and four million women. In addition, about one-fifth of the eight million 13-14-year-olds have had sex. A 1976 national survey confirmed that a growing proportion of teenagers are sexually active and that they are beginning their sexual activity at earlier ages. The study found that 35 percent of the single female teenagers had experienced intercourse in 1976 compared with 27 percent in 1971—a 30 percent increase. The proportion of sexually-experienced females rises from 18 percent at age 15 to 55 percent at age 19.

Most studies indicate that teenage sexual activity is sporadic. The 1976 study found that nearly half of the sexually experienced teenagers surveyed had not had intercourse in the month prior to the survey. The proportion of sexually experienced blacks (63%) is twice that of whites (31%) the survey found, but the rate of increase for whites from 1971 to 1976 is more than twice the rate for blacks.

Along with increasing sexual experience, teenagers are also contracting venereal diseases in growing numbers. Teenagers aged 15-19 are three times more likely to contract gonorrhea than people over 20, while the risk of syphilis is 61 percent greater for teenagers.

Many Teens Risk Pregnancy

Few teenagers begin to use contraception at the same time that they begin having sexual intercourse and their contraceptive use is typically sporadic. A 1975 study in four cities found that almost half of the sexually-active females and nearly 70 percent of the males surveyed risked pregnancy at least once. A national survey of teenage contraceptive practice revealed that the sexually active single teenage women who had never used contraception had increased from 17 percent in 1971 to 26 percent in 1976.

Nevertheless the 1976 survey also found that those teenagers who do use contraceptives select more effective methods today than in 1971. The study found that nearly two-thirds (64%) of the single teenage women interviewed had used birth control at last intercourse and one-third of them had used the Pill or IUD. Three in 10 said they always used contraception. The Pill was named the most recently used method by 47 percent of the teenage women using contraception, while 21 percent used the condom, 17 percent used withdrawal, 8 percent used foam, cream, diaphragm or rhythm, 4 percent used douches, and 3 percent had an IUD.

Many teenagers who do not use birth control are poorly informed about the risks of pregnancy. According to a 1971 national survey, seven in 10 of the single teenage women who did not use birth control explained that they thought they had sex too infrequently or that they had intercourse at the "safe time of the month." Ironically, only 38 percent of the teenagers surveyed could identify the time of the menstrual cycle when pregnancy is most likely to occur.

Citing other reasons for contraceptive non use, 31 percent of the respondents said that they could not obtain contraceptive services, 24 percent explained that contraceptives interfered with the pleasure or spontaneity of sex, and 13 percent mentioned moral or medical objections to contraceptives. (Respondents gave more than one answer.) Nevertheless, eight out of 10 (84%) of the non users said that they did not wish to become pregnant.

Research studies have found no evidence that the availability of abortion would weaken the motivation to use contraception. In a 1971 study, sexually-experienced teenage women were

asked what they thought a young unmarried girl should do if she finds herself pregnant by a boy she does not love. Only one in five chose the option of abortion.

Clinic Services for Teens Inadequate

Between 1971 and 1975 the number of teenagers on family planning clinic rosters more than doubled. Nevertheless, many teenagers are still unable to obtain clinic services and many programs fail to reach teenagers early enough. One study of 40 family planning clinics found that 94 percent of the teenage patients had had sexual intercourse before seeking contraceptive services, and 75 percent had been sexually active for at least a year. Thirty percent of the teenagers had been pregnant previously.

In 1975 there were 1.1 million teenage women enrolled in organized family planning programs, constituting 30 percent of the national clinic caseload. Nearly half of the adolescent patients had never used contraception prior to enrollment. After enrollment, 84 percent used the most effective methods—the Pill or the IUD. An additional 850,000-1,000,000 teenage women receive contraception from private physicians. However, about half of the four million sexually active females aged 15-19 are still not receiving family planning help from any source. A meager seven percent of the sexually active teens younger than 15 are currently receiving family planning services.

Pregnancy among Teenagers

Planned Parenthood's Alan Guttmacher Institute (AGI) estimates that each year more than one million teenagers aged 15-19 become pregnant—one in 10 of the females in this age group. In addition, 30,000 girls younger than 15 get pregnant annually. More than two-thirds of all teenage pregnancies are believed to be unintended.

Of the million pregnancies which occurred in 1974, 28 percent resulted in marital births that were conceived following marriage, 27 percent were terminated by abortion, 21 percent resulted in out-of-wedlock births, 14 percent ended in miscarriage, and 10 percent resulted in marital births that were conceived prior to marriage.

Among pregnant adolescents 14 and younger, 45 percent have abortions, about 36 percent give birth out of wedlock, and 13 percent miscarry. Only 6 percent of these young teenage pregnancies end in marital births.

Teens Have One-third of U.S. Abortions

Teenagers account for about one-third of all legal abortions—an estimated 325,000 abortions in 1975. In 1974, three in 10 teenage pregnancies were terminated by abortion. About half of all teenage abortions were obtained by 16 and 19 year-olds, 45 percent by 15-17 year-olds, and 5 percent by girls 14 and younger. Between 1972 and 1975, the abortion rate rose from 19 to 31 procedures per 1,000 women under age 20. Increased availability of abortion has slowed the rise in out-of-wedlock births which began in the late 1960's, but it has not reversed the trend.

Legal abortion is still not equally available throughout the country. Abortion services tend to be concentrated in one or two metropolitan areas in each state. The need to travel outside one's community is a hardship for young and poor women who often can't afford such a trip. The unequal distribution of abortion services is evident in the varying abortion rates for teenagers in different states, ranging from three abortions per 1,000 live births in Mississippi to 1,300 per 1,000 births in New York. The Alan Guttmacher Institute estimates that a minimum of 125,000 teenagers were unable to obtain needed abortion services in 1975.

Childbearing among Teenagers

In 1975, nearly one in five (19%) of all births in the United States was to a teenager—12,642 births to women under 15 and 582,238 to women aged 15-19. Fertility rates for older teenagers have fallen slightly in recent years though not as sharply as the declines among women aged 20 and older. Births to girls younger than 14 have increased, while fertility among young women aged 14-17 has remained at approximately the same level. Between 1974 and 1975 the fertility rate for girls aged 10-14 increased by 8 percent.

The proportion of teenagers giving birth rises rapidly with age. The National Center for Health Statistics calculated that in 1975 nearly 1 percent of the 15-year-olds had had at least one child, 3 percent of the 16-year-olds, 6 percent of the 17-year-olds, 12 percent of the 18-year-olds, 20 percent of the 19-year-olds, and 30 percent of the 20-year-olds. Teenagers tend to have their children in quick succession. In 1975 nearly one-fourth (24%) of mothers aged 20 had had more than one child. 21 percent of all births to teenagers were second or higher order births.

Nearly two in five (39%) of all births to teenagers are out-of-wedlock, and the proportion of births to unmarried teens is increasing. With the decline in marital fertility there has been a corresponding increase in childbearing outside of marriage for both white and black teenagers. In 1975 one in five babies born to white teenagers and three in four babies born to black teenagers were out-of-wedlock. Over half (52%) of the out-of-wedlock births in 1975 were to teenagers—11,000 to women under 15 and 222,500 to women aged 15-19, a 5 percent increase over the previous year. Among those teenagers who give birth out of wedlock, 87 percent keep the child, 5 percent send the baby to live with others, and 8 percent give the baby up for adoption.

Teen Mothers Run Health Risk

Both the adolescent who gives birth and her infant face greater risk of death, illness, or injury than do women in their 20's. The maternal death rate is 80 percent higher for teenagers aged 14 or younger and 13 percent greater for 15-19 year-olds than for women in their early 20's. Women giving birth at ages 15-19 are twice as likely to die from hemorrhage and miscarriage and 1.5 times more likely to die from toxemia (blood poisoning) than mothers in their early 20's. The risks increase dramatically for women under 15 giving birth: they are 3.5 times more likely to die from toxemia. Although the health risks for younger teenagers are considerably higher than those for women aged 18-19, the risks generally increase with parity so that an 18-year-old experiencing a second pregnancy may have dramatically increased health risks.

The most common complications of teenage pregnancy are toxemia, prolonged labor and iron-deficiency anemia. Poor nutrition, inadequate prenatal care, and physical immaturity contribute to the risk of complications.

Children born to teenage mothers are two to three times more likely to die in their first year than babies born to women in their 20's. About 6 percent of first babies born to girls under 15 die in their first year. The incidence of prematurity and low birth weight is higher among teenage pregnancies, increasing the risk of such conditions as epilepsy, cerebral palsy, and mental retardation.

The Options for Young Parents

Education. Pregnancy and motherhood are the major causes of young women leaving school. Eight out of 10 women who

become pregnant at 17 or younger never complete high school. Among teenage mothers 15 and younger, nine in 10 never complete high school and four in 10 fail to complete even the eighth grade. Despite legislation and court decisions upholding the right of school-age parents to education, the drop-out statistics suggest that many schools' policies and personnel may discourage pregnant students from continuing their schooling.

Employment and Economic Opportunity. Because many young mothers do not complete high school and the vast majority (76%) in a New York City study have no work experience, adolescent mothers are doubly disadvantaged in competing for jobs. Childcare responsibilities often further restrict employment opportunities. Teenage mothers are more likely to be unemployed and to receive welfare than mothers who post-date their childbearing until their 20's. The New York City study of teenage mothers found that 91 percent of the women who gave birth at ages 15-17 were unemployed a year and a half after the birth and 72 percent were receiving welfare assistance. Even 18- and 19-year-old mothers were slightly more likely than older mothers to be unemployed and two and a half times more likely to be on public assistance.

Marital Prospects. Teenage marriages are two to three times more likely to break up, compared with those who marry in their 20's. Teenage couples who marry as a result of pregnancy are more likely to be economically disadvantaged in terms of occupation, income, and assets than are couples of similar socioeconomic status. Such marriages are also more vulnerable to divorce and separation. A Baltimore study of premaritally pregnant teenage couples (17 or younger) found that one-fifth of the marriages broke up within one year and nearly one-third dissolved within two years. Within six years, three in five of the couples were divorced or separated.

Family Size. Women who give birth as teenagers tend to have a larger completed family size and tend to have their children closer together. Married women who have their first child at age 17 or younger expect a completed family of four, while wives whose first birth comes at the ages of 20-24 expect fewer than three children. Women who have their first child at age 17 or younger will have 30 percent more children than women who begin childbearing at ages 20-24, and women aged 18-19 at first birth will have 10 percent larger families.

Laws Regarding Minors

During the last five years, there has been a clear trend toward liberalizing laws regarding the right of minors to consent to their own medical care. Currently, 26 states and the District of Columbia specifically affirm the right of minors to consent to contraceptive care, and all 50 states allow minors to consent to venereal disease treatment. In July 1976, the U.S. Supreme Court overruled a Missouri law which required a minor to have parental consent to obtain an abortion, thus invalidating similar laws in 26 states. Earlier in 1976, the Supreme Court ruled that Federally funded family planning programs must serve eligible minors on their own consent.

Despite this liberal trend and despite the fact that no physician has been held liable for providing contraceptive services to minors of any age, many agencies and physicians still refuse fertility control services to minors without written parental permission.

The right of minors to purchase non-prescription contraceptives was upheld by the U.S. Supreme Court in a June 1977 decision. The Supreme Court invalidated a New York law which banned the sale of non-prescription contraceptives to persons under 16.

Teens Denied Information

Despite evidence from several studies that one of the major causes of unwanted teenage pregnancy is ignorance about human reproduction and the risk of pregnancy, young people continue to be denied the information they need to make responsible decisions related to their sexuality.

Research suggests that mass media, especially television and radio, are an important source of family planning information for teenagers. A 1974 family planning communication study found that mass media contributed more to teenagers' family planning knowledge than other sources, including parents, peers, or schools. However, the researchers' analysis of media coverage revealed that television and radio provided very little contraceptive information. Television contained an average of only eight minutes of family planning-related programming in an entire month, while radio broadcast an average of 14 minutes monthly. Newspapers contained only 19 items during the month.

Contraceptive advertising on television and radio is banned by the Code Authority of the National Association of Broadcasters, thereby eliminating another potential source of information about contraceptives.

At present, only 29 states and the District of Columbia require the teaching of health education in public high schools, and only six of these states and the District mandate family life or sex education as part of the curriculum. While Louisiana is the only state which outlines sex education altogether, both Michigan and Louisiana specifically prohibit teaching about contraception.

Many states officially "encourage" the teaching of these subjects in their education policies but allow for local options. Consequently, hundreds of school districts have ignored, restricted, or prohibited sex education.

Even where sex education is provided in schools, contraception is often not discussed. A 1970 survey of U.S. school districts revealed that only two in five sex education teachers included contraception in their curricula. Human reproduction, adolescent development, and venereal diseases were the most commonly covered topics. A recent national survey of high school teachers in population-related subject areas found that only one third taught anything about human reproduction, sexuality or abortion. Even fewer taught about birth control.

The Job to Be Done

A report submitted in 1976 to the Department of Health Education and Welfare by Urban and Rural Systems Associates recommends that sexually-active teenagers be designated a high priority target population for family planning services and that Federal and state funding for family planning services be increased. To increase clinic attendance, the report encourages the establishment of separate teen clinics with sensitive staffs and low-cost, confidential treatment. State laws and policies which restrict teenage patients in consenting to their own contraceptive care should be modified, the report notes.

Additional recommendations for a national program to deal with the problems of adolescent childbearing were issued by the Alan Guttmacher Institute in 1976. Its recommendations include:

- Realistic sex education via school, churches, and mass media, including information about pregnancy risks, contraception, and abortion and places where teenagers can obtain health services.
- For pregnant teens, adequate pregnancy counseling with non-judgmental information on all available options, including abortion referral.
- Adequate prenatal, obstetrical and pediatric care for teen-agers who carry their pregnancy to term in order to minimize the hazards of early childbearing for both mother and child.

- Educational, employment and social services for adolescent parents and day care for their infants to help teenagers realize their educational and career goals.

- Rational health insurance coverage for all health services related to adolescent pregnancy and childbearing with provisions to protect the privacy of minors.

- Expansion of biomedical research to discover new, safe and effective methods of contraception more suited to the needs of young men and women.

Much more work needs to be done to educate teenagers and their parents on the problems related to teenage pregnancy and the availability of contraceptive information, counseling and services. In addition, school authorities, social workers and health personnel, especially physicians, must be made aware of the special needs of teenagers.

Teenage pregnancy is a complicated problem which will be with us for some time to come. Failing to act today only compounds the high human, social and economic costs to be borne by teenage mothers, their children and society in general.

Public Savings

Pregnancy prevention programs are highly cost-effective in saving future government expenditures to support out-of-wedlock children and their mothers. The Planned Parenthood Federation of America estimates that every dollar spent in one year on family planning saves two dollars in the following year alone and many times the original expenditure in the long term. The California Department of Public Health calculated that if only 20 percent of eligible minors used contraceptive services and only 10 percent of teenage pregnancies were prevented, the net savings to the state would be \$2.3 million in the first year.

Suggested Reading

- *11 Million Teenagers Who Can Be Free About the Epidemic of Adolescent Pregnancy in the United States*, 84 pages, \$2.50, Available from: The Alan Guttmacher Institute, 515 Madison Ave., New York, N.Y. 10022.
- *Adolescent Pregnancy and Childbearing: Growing Concerns for America*, Wendy H. Baldwin, Population Bulletin Vol. 31, No. 2, 30 pages, 75¢. Available from: Population Reference Bureau, 1527 Connecticut Ave., N.W., Washington, D.C. 20036.
- *Sex Education Action/Resource Bulletin*, 6 pages, free, Available from: The Population Institute, 110 Maryland Ave., N.W., Washington, D.C. 20002.
- *Sex and Birth Control: A Guide for the Young* by E. James Underman and Ellen Pack, 269 pages, \$2.45 (paper), New York: Schocken Books, 1970.
- *You by Sol Gordon with Roger Constant*, 142 pages, \$0.99 (paper), New York: Quadrangle/The New York Times Book Co., 1975.
- *Improving Family Planning Services for Teenagers* by Urban and Rural Systems Associates, 31 pages, free, Available from: Mrs. Clara Schuster, Office of Planning and Evaluation, Dept. of Health, Education and Welfare, South Post Office, 441E, 200 Independence Ave., S.W., Washington, D.C. 20201.

Prepared by Cynthia P. Green and Kate Pottelger

Additional copies of *Teenage Pregnancy: A Major Problem for Minors* are available from Zero Population Growth, 1848 Connecticut Ave., N.W., Washington, D.C. 20036. Single copies free, 2-49 copies, 12¢ each, 50-199, 11¢ each, 200-499, 9.5¢ each, 500 or more, 8.5¢ each. For data and information sources, write to ZPG.

Zero Population Growth Inc. is a national membership organization which advocates U.S. and world population stabilization. ZPG's lobbying and public education programs address a wide range of issues including population growth, family size, immigration, teenage pregnancy, abortion and national growth policy. ZPG welcomes inquiries regarding membership and provides a free publication's list upon request.

Printed on 100% Recycled Paper

*Adolescent
Pregnancy and
Childbearing—
Growing Concerns
for Americans*



Adolescent Pregnancy and Childbearing— Growing Concerns for Americans

Abstract—With their numbers swollen by the postwar baby boom to a record 20 million plus, adolescent women in the United States now account for nearly 20 percent of annual births, over half of illegitimate births, and a third of annual abortions. Sexual activity among teenagers appears to be increasing while their marriage rates decline. This *Bulletin* examines the negative impact of these trends on society and the health and life chances of the women and children involved, documents the barriers to effective practice of contraception by teenagers, considers racial differences, and briefly relates the U.S. experience to that of other countries.

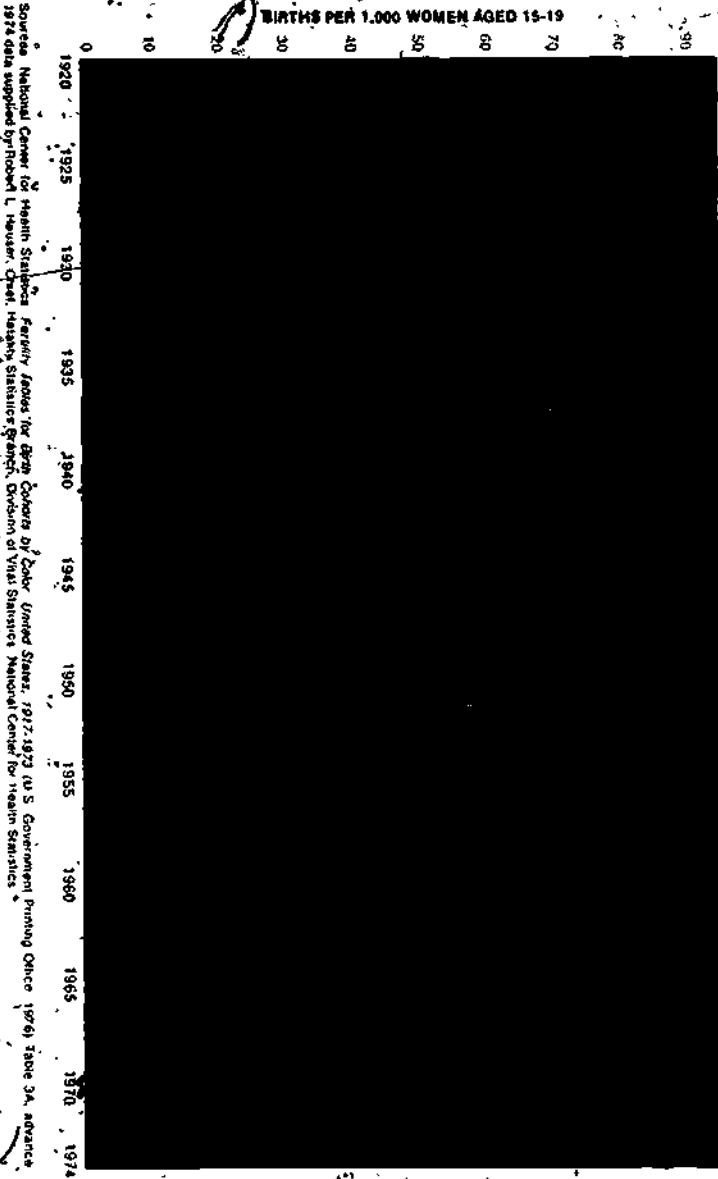
The *Population Bulletin* is issued regularly to all members by the Population Reference Bureau, Inc., 1754 N Street, N.W., Washington, D.C. 20036. Comments and suggestions are welcome and should be addressed to Jean van der Tak, Editor.

The suggested citation, if you quote from this publication, is: Wendy H. Baldwin, "Adolescent Pregnancy and Childbearing—Growing Concerns for Americans," *Population Bulletin*, Vol. 31, No. 2 (Population Reference Bureau, Inc., Washington, D.C., 1976). You may also adapt or reproduce charts and tables if you include the credit line: *Courtesy of the Population Reference Bureau, Inc., Washington, D.C.*

The *Population Bulletin* is indexed in *Social Sciences Index*, *Population Index*, and *Social Sciences Citation Index*. It is included in the coverage of *Current Contents/Social Behavioral Sciences* and *BioSciences Information Service of Biological Abstracts*.

Cover design by Phyllis Avedon—Charts by James O'Brien

Figure 1. Fertility Rates of U.S. Women Aged 15-19, 1920-1974



For updated material see page 35.

Adolescent Pregnancy and Childbearing— Growing Concerns for Americans

By Wendy H. Baldwin

Dr. Baldwin is a social demographer on the staff of the Behavioral Sciences Branch of the Center for Population Research, National Institute of Child Health and Human Development, National Institutes of Health, which administers a contract research program in the behavioral sciences. She monitors a research program which includes studies of the consequences of adolescent pregnancy and childbearing, and has chaired a conference on the determinants of adolescent pregnancy and childbearing. Dr. Baldwin was a participant in the First Inter-Hemispheric Conference on Adolescent Fertility, held at Airle House, Warrenton, Va., August 31-September 4, 1976. She has a Ph.D. in sociology with a minor in demography from the University of Kentucky and worked with the Colombian National Fertility Survey, 1969. Her doctoral dissertation based on that survey has been published in Spanish by the Colombian Association of Medical Faculties (ASCOFAME). She has also reported on this research in Studies in Family Planning.

Pregnancy, and childbearing among teenagers is currently of growing interest and concern in the United States. Newspaper stories depict "Kids Having Kids" and official statistics show a dramatic rise in illegitimate births to young mothers. Are these concerns realistic? What is happening with teenagers today regarding fertility, contraception, and sex; and how does it differ from the past?

Presently, there are over 20 million American women between the ages of 10 and 19, almost equal to the population of Canada. These products of the postwar baby boom add up to the largest number of adolescent women the United States has ever had at one time. According to one survey, over a quarter of the young women aged 15 to 19 are sexually active and thus have enormous potential for contributing to our country's growth.

In this *Bulletin* we will look at current patterns, changes over time, sexual behavior, contraceptive practices, abortion, and childbearing among these adolescents, and briefly compare the U.S. experience to the situation in other developed nations. When possible this picture of adolescent fertility-related behavior will separate births occurring within marriage and those borne out of wedlock, look at differences by age of the women involved, and review differences between racial groups. Since most of the relevant statistics are gathered with the woman as the focus, the information on men is scarce, but this too will be presented wherever possible.

Overall Fertility Rates Among Teenagers

Contrary to what may be the general impression, overall rates of childbearing among U.S. teenagers have actually fallen in recent years, from a high of 97.3 births per 1,000 women aged 15 to

19 in 1957 to 58.7 in 1974. The drop amounted to more than a third between 1960 and 1974. This substantial decline, however, has not been as extreme as that experienced by older women. From 1960 to 1974 rates fell by 54 percent among women aged 20 to 24 and 43 percent among those aged 25 to 29. The inference means that births to teenagers now figure more prominently among all births—up from 14 percent of the total in 1960 to nearly one in five (49 percent) in 1974.

A decreasing birth rate does not necessarily mean decreasing numbers of births. While teenage birth rates turned down from 1960 to 1974, the number of women aged 10 to 19 swelled from around 15 million to over 20 million and the annual total of births stayed about the same, dropping only from 609,000 to 608,000 (12,529 to women under 15 and 595,449 to women aged 15 to 19). We can see that even with the substantial decline in fertility rates for teenagers the problem in terms of numbers of women, children and others affected has hardly changed at all.

The long view

Comparing current birth rates with the rates for 1960 is somewhat problematic because 1960 was an era of very high

teenage fertility rates. If we step back and take a longer perspective we see that fertility rates for women aged 15 to 19 declined from at least 1920 until the period 1935-1945 and then began to rise. After peaking in the late 1950s the rates started to fall for teenagers, as for all women in the United States. These patterns are similar for first births and for second and higher order births, although the swings have been more erratic for the latter, as can be seen in Fig 1 on page 2.

Age differences

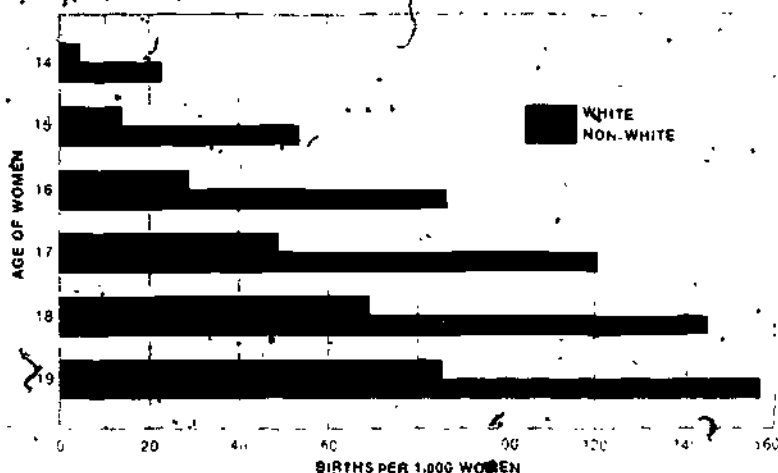
To group all teenage mothers together is also misleading since fertility rates and trends vary for teenage women at different ages. Table 1 shows the rates for 14- to 19-year-old women by single year of age and by year of birth back to 1910 so we can see the change over time. The first row is for women born in 1955 and therefore age 14 in 1969, the second row is for women born in 1950 who were age 14 in 1964, and so forth. Women born in 1940 had the highest fertility at each age. Rates at all ages have declined from that peak since then. However, the most recent birth experiences show rates rising again for the very young girls, while continuing to fall for the older teens.

Table 1. Long-Term Trends in Birth Rates among U.S. Teenagers, by Single Year of Age and Year of Birth

Year of birth	Births per 1,000 women at age					
	14	15	16	17	18	19
1955	6.0	19.2	38.3	63.5	83.1	96.2
1950	5.2	16.5	35.5	63.2	95.7	124.5
1940	6.3	19.9	46.8	89.3	138.1	187.6
1930	3.8	11.8	26.6	70.3	113.8	150.2
1920	3.4	11.3	25.0	49.8	78.1	98.8
1910	3.7	12.4	28.7	56.6	83.8	105.3

Sources: National Center for Health Statistics, *Fertility Tables for Birth Cohorts by Color, United States, 1917-1973* (U.S. Government Printing Office, 1978); Table 4A, Robert L. Heuser, Chief, Fertility Statistics Branch, Division of Vital Statistics, National Center for Health Statistics, personal communication.

**Figure 2. Birth Rates of U.S. Teenage Women:
by Age and Race: 1974**



Source: Advance data supplied by Robert Schoen, et al., *National Center for Health Statistics*, Division of Vital Statistics, 1974.

- In the five years from 1970 to 1974 births for 14-year-olds climbed 9 percent from 6.6 to 7.2 per 1,000 and 3 percent for 15-year-olds (19.2 to 19.7). Meanwhile, the rate eased down a further 3 percent to 37.7 per 1,000 for 16-year-olds. For 17-, 18-, and 19-year-olds there were sharp drops of 11, 16, and 24 percent respectively, their rates being 59.7, 80.5, and 96.2 in 1974. It is disturbing that the rates are rising fastest for girls least able to care for a baby. Girls under the age of 15 bore almost 13,000 babies in 1974.

Each recorded birth is the end result of a chain of events which occur with varying amounts of knowledge, understanding of the consequences or conscious decision-making. The factors that influence entry into sexual activity, the use of contraceptives, and the decision to seek an abortion may all be quite different for the 14-year-old than for the 18-year-old. Adolescence is a period of

rapid change for the individual and not the least of those changes involves dealing with puberty including one's own growing sexual awareness and changing interpersonal and social pressures. These differences by age influence not only the factors leading up to a birth but also the consequences of that birth. As we shall see, one major difference between younger and older teenagers relates to the propensity to marry.

Racial comparisons

As seen in Fig. 2, teenage fertility is higher for nonwhites than for whites. The birth rates for single years of age illustrate the extreme racial differences in childbearing for young adolescents. For girls aged under 14 the nonwhite rate is five times that of whites but among 19-year-olds, the nonwhite rate is less than twice the white rate.

A comparison of rates by single year of age for the past five years shows an interesting difference by race. For girls

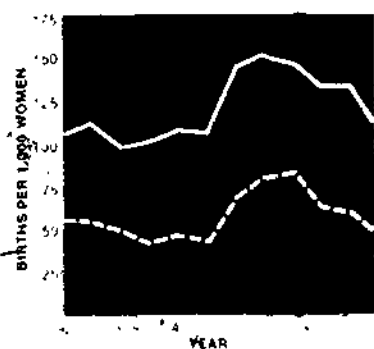
Table 2. Percent Change in Teenage Birth Rates by Race and Single Year of Age: 1970-1974

Race	Age					
	14	15	16	17	18	19
White	19	19	19	19	19	19
Nonwhite	4	4	4	4	4	4

over age 16 birth rate are falling for both groups at about the same rate. Rates for 16 year olds have risen sharply among white girls while remaining flat percent among nonwhites. The real difference comes in the young teens where black rates are falling and white rates are increasing (Table 2).

It is far too early to conclude that the rates are converging because the rates will quite different in magnitude. Fertility rates for white teenagers have been very low and traditionally quite high for their nonwhite counterparts. This difference in recent trends is striking even though generally they have

Figure 3. Fertility Rates of U.S. Women Aged 15-19 by Race: 1920-1974



followed the same pattern, as shown in Fig. 3.

One black male, about 9 percent of the U.S. nonwhite population at most ages, may be speculating that the disparity between nonwhite and white teenage fertility rates is influenced by the greater sexual activity at younger ages of black girls, and possibly the earlier maturation of their reproductive systems. By age 15, 21 percent of black girls are menstruating compared to only 11 percent of whites. This racial difference in physical development is found with categories of income and place of residence, although geographic regions except the South reject the National Center for Health Statistics. Whites catch up by age 23 when their fourth of all girls are menstruating.

One does not ignore differences in physical and cultural factors which affect the behavior of black and white girls, and the Negro influence birth rates. However, it is important to note the similarity in fertility patterns between these groups, similarities which probably reflect common reactions to social forces appropriate in our society. Both race groups have recorded considerable drops in the birth rates for the older teenagers.

Legitimate and Illegitimate Births

When age is inspected, it reveals that illegitimate rates are overall teenage child

bearing have perhaps not been so startling as is sometimes supposed, there have indeed been disturbing changes in illegitimacy among young U.S. women. From 1960 to 1974, the illegitimacy rate (number of births per 1,000 unmarried women) declined for all age groups over 20, but increased by 52 percent for women aged 15 to 19 (Table 3). In actual numbers, out-of-wedlock births to teenagers have more than doubled, from 92,000 in 1960 to 221,400 in 1974—10,600 to women under 15 and 210,800 to women aged 15 to 19. Meanwhile, illegitimate births fell for this age group, as for all American women—from an annual 511,000 to 387,000 over the same period. Thus, illegitimacy is becoming increasingly concentrated in the teenage years. Over half (53 percent) of the 1974 total of 418,100 illegitimate births in the United States occurred to teenage mothers.³

Age differences in teenage illegitimacy

As is true for overall fertility, illegitimacy among teenagers varies markedly by age. The majority of births to teenagers as a whole still occur within marriage, although a substantial proportion of these are conceived outside of marriage. As might be expected, older teenagers are far more likely to be married when their babies are born than are the

younger teens. In 1974, less than a quarter (23 percent) of births to 19-year-olds were out of wedlock, compared to 85 percent of those to girls under the age of 15. It is unlikely that a girl under 15 would be able to carry out the roles of wife and mother even if she has carried a pregnancy to term. One might also speculate that the boys these girls are involved with are unprepared to assume the roles of husband and father. In fact, in cases where data are available, 72 percent of fathers of babies born to women under 15 are themselves in their teens.⁴

Table 4 on the next page further illustrates some of these points. From 1960 to 1974, the proportion of teenage births occurring out of wedlock jumped from 15 to 36 percent, with the rise shared by all age groups. The very large increases among 18- and 19-year-olds should be interpreted with caution, however. Their proportions of illegitimate births were lowest in 1960 and hence had the greatest potential for increase.

Racial similarities and differences

Again, as with overall birth rates there are similarities and differences in patterns of illegitimacy for white and non-white teenagers. For both groups the proportion of children born out of wedlock is up since 1960, but remains much

Table 3. Illegitimate Births per 1,000 Unmarried Women by Age: 1960 and 1974

Year	Ages					
	15-19	20-24	25-29	30-34	35-39	40-44
1960	15.3	39.7	45.1	27.8	14.1	3.6
1974	23.2	30.9	28.4	18.6	10.0	2.6
Percent change						
1960-1974	+ 52	- 22	- 37	- 33	- 29	- 28

Sources: National Center for Health Statistics. Trends in Illegitimacy, United States 1940-1965. *Vital and Health Statistics, NCJ, Series 21, No. 15* (February 1968); Table 1. National Center for Health Statistics. Advance Report. Final Natality Statistics 1974. *Monthly Vital Statistics Report, Vol. 24, No. 11* Supplement 2 (February 13, 1976); Table 11.

Table 4. Percent of Births to Teenage Women Borne out of Wedlock: 1960 and 1974.

Year	Age of Mother			
	Under 15	15-17	18-19	All under 20
1960	68	24	11	15
1974	85	48	27	36
Percent change				
1960-1974	+25	+100	+145	+140

Sources: National Center for Health Statistics, "Trends in Illegitimacy, United States 1940-1965," *Vital and Health Statistics*, Series 27, No. 15 (February 1968) Table 9; National Center for Health Statistics, "Advance Natality Statistics 1974," *Monthly Vital Statistics Report*, Vol. 24, No. 11, Supplement 2 (February 13, 1976) Table 11.

higher for nonwhites than whites. In 1974 this proportion was 21 percent for all white teenagers and 73 percent for their nonwhite counterparts. Both groups also show highest proportions of out-of-wedlock births among the youngest teenagers. Numbers of births per 1,000 unmarried women (illegitimacy rates) also registered a similar dramatic increase for both white and nonwhite teenagers between 1960 and 1974. Again, rates for nonwhites continue at a level far above those of whites (Table 5).

Out-of-Wedlock Conceptions and Births

There are actually three categories of births of interest in regard to teenage fertility. Some births are conceived in marriage, others are conceived outside of marriage but occur within marriage, and still others are both conceived and delivered out of wedlock. Arthur A. Campbell has made estimates for the periods 1960-1964 and 1970-1974 to show how these three groups of births to teenagers have changed. He found that the proportion of births that were conceived out of wedlock remained at about 50 percent in both time periods. The proportion that were actually born out of wedlock, however, increased sub-

stantially. Conversely, the percent of out-of-wedlock conceptions "legitimized" by marriage has fallen from approximately 65 to 35 percent in this brief period.⁷

The pattern seems clear. The dramatic rise in illegitimate births to teenagers has not occurred because of more out-of-wedlock conceptions, but because fewer out-of-wedlock conceptions now lead to marriage. This means our search for explanations of the increase in numbers of illegitimate births should center on changing teenage behavior with regard to marriage.

Why have U.S. teenagers apparently become so much less inclined to select marriage as a solution to an out-of-wedlock pregnancy? Young women could be more willing to place their

Table 5. Illegitimate Births per 1,000 Unmarried Women Aged 15-19, by Race: 1960 and 1974.

	Total	White	Nonwhite
1960	15.3	6.6	76.5
1974	23.2	11.1	88.8

Sources: National Center for Health Statistics, "Trends in Illegitimacy, United States 1940-1965," *Vital and Health Statistics*, Series 27, No. 15 (February 1968) Table 2; National Center for Health Statistics, "Advance Natality Statistics 1974," *Monthly Vital Statistics Report*, Vol. 24, No. 11, Supplement 2 (February 13, 1976) Table 11.

children for adoption, more interested in raising the child themselves, or young men could be less willing to assume the responsibility of marrying or less susceptible to the pressures that forced the couple to marry in the past. High unemployment among both young men and women could make setting up housekeeping seem unrealistic or the Aid to Families with Dependent Children Program could make raising a child alone economically feasible.

A study of first-time mothers in New York City found that over half of those who had borne their child out-of-wedlock did not want to marry, the father, although some still saw the man. Their reasons reflected a thoughtful assessment of the roles of father and husband and the conclusion that the man involved could not fulfill them. He may have been an alcoholic, a drug user, in jail, or irresponsible. Marrying him could have resulted in more problems than another solution to an untimely pregnancy. Most of these women, however, did want to marry eventually.⁹

Let us take a look at changing teenage marriage patterns.

Marriage Among Teenagers

While high rates of illegitimacy and marital disruption receive much attention from both the media and social scientists, the fact remains that Americans are very marriage-prone. Of women aged 35 to 39 in 1970, 95 percent were currently, or had been, married, and the comparable figure for men was 93 percent.¹⁰ About 37 percent of this group of women had married by the age of 19. By contrast less than a quarter (23 percent) of women aged 19 in 1970, were or had been married.¹¹

A detailed measure of marriage behavior is the cumulative first marriage rate which shows the number of mar-

riages at different ages per 1,000 women in a birth cohort, i.e., born during the same period, such as 1950-54. A time series of such rates reveals a striking change in marriage patterns among U.S. teenagers. Table 6 on the next page presents these rates by single year of age during the teenage years for women who were born between 1920 and 1954. The women born from 1950 to 1954 were teenagers in the late 1960s and early 1970s and can be compared with women born 1935-49 who were teenagers in the early 1950s. Rates of first marriage at 18 and under rose until the cohort of women born 1935-39, and then declined. The declines have been significant at all ages, but largest for the youngest girls.

Why the downturn in teenage marriages?

In 1967, Robert Parke and Paul Glick of the Census Bureau speculated on reasons for the general downturn in teenage marriage which became evident during the 1960s and hypothesized a "marriage squeeze." Because of the baby boom there has been an imbalance of men and women of marriageable age. Women generally marry men a few years older than themselves and the increasing size of cohorts that resulted from the baby boom meant that as the first members of the baby boom reached age 19 in 1965, for example, there were more women aged 19 (born in 1946) than men aged 21 or 22 (born in 1943 or 1944).¹² The baby boom peaked in 1957 after which the birth rate has maintained a downward trend. Thus young women entering the marriageable ages in 1977 or later years, will find an excess of men several years older than themselves. This could prompt another shift toward more women marrying early.

But the availability of marriage partners is only one factor influencing marriage rates. The extent to which women are staying in school, going into college,

Table 6. Cumulative First Marriage Rates* among U.S. Teenage Women Born 1920-1954

Year of birth of women	Age at last birthday			
	15	16	17	18
1950-54	14	34	75	155
1945-49	26	52	101	193
1940-44	36	72	134	239
1935-39	43	83	151	262
Percent decline 1935-39/1950-54	- 67	- 59	- 50	- 41
1930-34	35	74	141	247
1925-29	36	65	117	203
1920-24	31	59	107	183

Source: U.S. Bureau of the Census. Childbearing and Current Fertility. Subject Reports, PC(2)3B (U.S. Government Printing Office 1975) Table 1.

*Number of ever-married women per 1,000 women.

or even graduate school has increased. Coupled with increased labor force participation of women, this suggests that fewer women may now feel obligated to marry as soon as possible for lack of an alternative, socially acceptable role.¹² As for young men, continued employment uncertainties may make them less willing to commit themselves to marriage.

The apparent upturn in numbers of young couples living together either before marriage or in place of marriage may also continue. Paul Glick has reported that "compared to 1960, 50 times as many men and more than 16 times as many women age 18-24 reported in 1970 that they shared their living quarters with an unrelated partner of the opposite sex," and that the number of such households was 82,000 in 1970. Furthermore, this number increased as much between 1970 and 1974 as it did between 1960 and 1970.¹³ Many such couples, even among the teenagers, may regard their situation as quite marriage-like, but this, of course is not reflected in official marriage statistics.

Adoption

One alternative to raising a child is placing the baby for adoption. Much has appeared in the media about the shortage of babies for adoption and one supposition is that more unwed mothers are now keeping their babies. We have just seen that fewer out-of-wedlock conceptions among teenagers now lead to marriage, but what do we know about adoptions?

Statistics on adoptions are collected by the Social and Rehabilitation Service, National Center for Social Statistics, but their reporting by states is voluntary and is thus incomplete. Still, the data we do have on adoptions may shed some light on the ultimate resolution of illegitimate births. Of course, these two groups are not synonymous since not all babies born out of wedlock are placed for adoption, nor are all adopted babies the result of out-of-wedlock births.

Figure 4 shows annual numbers of babies adopted and the number born out of wedlock from 1957 to 1973—a period with ever more illegitimate births

being attributed to teenage mothers. The two lines run in tandem until 1970, but the paths then diverge, with illegitimate births continuing to rise while the number of babies placed for adoption is turning down. If the proportion of illegitimate births placed for adoption had been constant through 1974 there should not have been the drop-off in adoptions since 1970. It does indeed appear that fewer mothers of babies born out of wedlock are relinquishing them for adoption.

This finding is supported by information from adoption agencies which report a sharp decline in the number of unwed mothers seeking adoption for their babies. Testifying in the Senate hearings for the Mother and Child Health Bill in November 1975, Elizabeth Cote of the Child Welfare League stated that

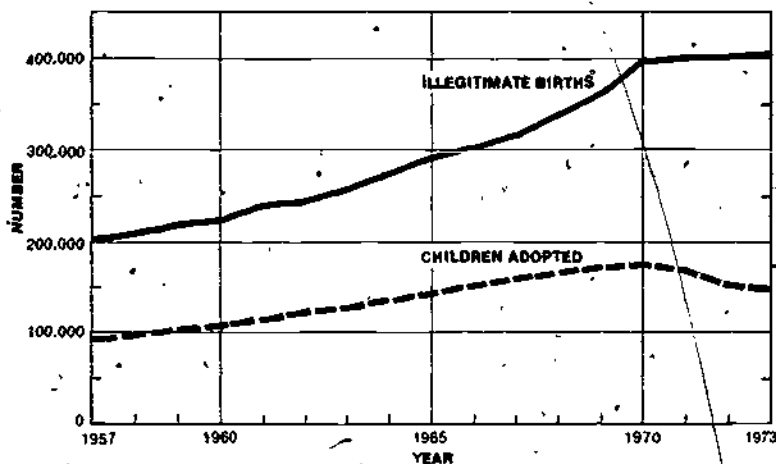
In adoption agencies about 5 years (ago), of all the mothers who came in asking for adoption services, approximately 80 percent would choose to place their children for

adoption, and about 20 percent would choose to keep their children and raise them. That figure is reversed. The figure now is 80 to 90 percent of the mothers coming to the adoption agency choose to keep and raise their children, and only 10 to 20 percent place their children for adoption.¹⁵

It is interesting to note that, despite their historically high rates of teenage childbearing and illegitimacy, blacks have always had low rates of adoption. A baby born to a young black girl is much more likely to be raised by the mother and her family than is the case among whites. In 1973, nonwhites accounted for only 13 percent of adopted babies¹⁶ in contrast to 60 percent of all out-of-wedlock births.¹⁵

Of course, it is possible that in the past women bore out-of-wedlock babies because abortion was not easily obtainable. With legal abortion theoretically available across the nation since the Supreme Court decisions of January 1973, it may be that those women most highly

Figure 4. Numbers of Illegitimate Births and Adoptions in the United States: 1957-1973



Source: Gordon S. Bonham, "Who Adopts: The Relationship of Adoption and Social-Demographic Characteristics of Women," presented to the American Sociological Association meeting, New York, August-September, 1976, Table A.

motivated not to have a child are electing abortion rather than adoption.

The *Adoption Statistics Bulletin* for 1971 noted that the decrease in the number of adoptions from 1970 to 1971—175,000 to 169,000—was attributable, in large part to the decline by 4,800 in children placed for adoption in California.¹⁷ Beth Berkov and June Sklar have analyzed the relationship of abortions to illegitimate births in California, one of the first states to liberalize abortion laws, and concluded that "there is good evidence that legal abortion in California has helped reduce both legitimate and illegitimate fertility but especially illegitimate fertility."¹⁸ While the data do not permit firm conclusions, it appears plausible that abortion has replaced adoption as a form of resolution for some out-of-wedlock pregnancies. For the 39 states where roughly comparable data were available there was a 36 percent decline in adoptions from 1971 to 1974, a period of increasing availability of legal abortion.

In short, the adoption market may be feeling the double effect of abortion now being available as an alternative to placing an out-of-wedlock baby for adoption plus the fact that more unwed mothers are evidently now opting to keep their babies.

Abortion as an Outlet?

Statistics do indeed confirm that many teenage pregnancies are now resolved through abortion. Approximately a third of the 783,476 legal abortions officially reported for 1974 to the Center for Disease Control in Atlanta were performed on women less than 20 years of age.¹⁹ A nationwide survey of medical facilities by the Alan Guttmacher Institute of the Planned Parenthood Federation of America suggests that the true total of abortions in 1974 was close to 900,000.²⁰ If so, there may have been

towards of 300,000 abortions performed on teenage girls in that year. Both sources of information indicate that although the total number of legal abortions rose from 1972 to 1974, the proportion performed on adolescents remained stable.

There are few national data relating social characteristics to abortion characteristics but some information is available on age distribution of teenagers obtaining abortions. According to this, for girls under the age of 15 there are now more abortions than live births. In 1974, the abortion ratio for 15-year-olds (number of abortions per 1,000 live births) was 1,156.²¹

Risks for teenagers

Abortion is generally recognized as an essentially safe procedure, with only 1 percent of those performed legally in the United States resulting in a major complication. But there are different risks according to the gestational period in which the abortion is performed. Early abortions (before the 13th week of pregnancy) are almost all performed by curettage, and usually suction aspiration, which has the lowest rate of complications and death. Abortions performed at 13 to 15 weeks of gestation are divided between curettage and intrauterine instillations (generally saline) and involve increased risks for the women. Late abortions are usually instillations and have the highest rate of complications and mortality (Table 7).

While morbidity and mortality rates are strongly tied to type of procedure, the selection of procedure is largely governed by the length of gestation. Data from New York City show that teenagers are disproportionately represented among women receiving late abortions. Of the girls under the age of 15 who received abortions in New York City in 1974, 34 percent were past the 15th week of pregnancy as were 21 percent of those girls aged 15 to 19. Only

Table 7. Abortion Deaths by Time of Performance and Type of Procedure: United States, 1974.

	Deaths per 100,000 legal abortions
Gestational Period	
Early	
0-8 weeks	0.3
9-12 weeks	2.4
Middle	
13-15 weeks	11.8
Late	
16 weeks and over	16.9
Type of procedure	
Curettage suction	1.7
Curettage sharp	5.3
Instillation	15.2

Sources: U.S. Center for Disease Control, *Abortion Surveillance 1974* (April 1976) Tables 20 and 21

13 percent of the women over 35 were this far along in their pregnancies at the time of the abortion. Nonwhites were more likely to have late abortions at all ages, but the pattern of age of mother and gestational period was the same for whites and nonwhites.²² Less experience with recognizing the symptoms of pregnancy, difficulty in resolving inter-personal conflicts about pregnancy and abortion, fear of reaction by parents and others, inexperience with the health care system and other factors are possible explanations. Teenagers, for whatever reasons, are probably being exposed to a greater risk than is necessary from a medical standpoint.

As for the short- and long-term social and psychological risks of abortion, studies in this area are incomplete but the findings are generally consistent. For the woman there are few apparent negative psychological consequences to

legal abortion although there may be transitory effects.²³ Researchers have not looked at possible psychological consequences for the man responsible for the pregnancy that ends in an abortion for a teenager.

Findings on the consequences of abortion are difficult to evaluate in that they should be contrasted to other potential outcomes: Is an abortion "better" or "worse" than carrying a pregnancy to term and placing the infant for adoption? Are there more long-term negative effects of a "forced marriage" than of abortion? These are difficult comparisons to make and therefore an accurate assessment of the "costs" of abortion is not easily come by.

However, the evidence does suggest that the teenage girl who thinks she might be pregnant should find out as quickly as possible. If she decides to have an abortion, the earlier she confirms the pregnancy and has the abortion, the safer the procedure. If she is planning to have the baby she should also begin prenatal care as soon as possible. Early prenatal care is important for the health of the baby and the mother, and adolescents are the least likely to seek such care early in their pregnancy.²⁴ Regardless of the anticipated outcome of the pregnancy, research shows that the earlier a course of action is entered upon, the more favorable the outcome.

Research is being reported from England which gives pause to the ease with which abortions may be undertaken for very young girls. Case data from J. K. Russell, Professor of Obstetrics and Gynecology at the University of Newcastle-upon-Tyne, on women who experienced abortions under the age of 16 reveal a disturbing picture of obstetrical and gynecological complications later in life.²⁵ The risk of trauma to the cervix, which tends to be small and tight in the younger teenager, appears far greater than for women under-

going first abortions over the age of 20. The reports from Dr. Russell are not so much an indictment of abortion, but rather a caution about the performing of abortions on very young women. Since upwards of 15,000 girls under the age of 15 had abortions during 1974 in the United States, this is not an insignificant problem. The available case data should be supplemented by long-term follow-up of a large sample of young women to assess the risks of abortion to that age group. Also, if the hypothesis regarding trauma to the cervix is correct, very early childbirth could also cause disproportionately more medical problems in later life.

Abortion and contraception

It is sometimes argued that liberal abortion laws will encourage the use of abortion as a substitute for contraception. This has not been supported by several studies which have probed for such a relationship. One such study was a pioneering in-depth survey of fertility-related attitudes and practices among a scientifically selected sample of 4,611 women aged 15 to 19 (only 8 percent of whom were or had been married), conducted across the United States in 1971 under the direction of John Kantner and Melvin Zelnik of Johns Hopkins University. The investigators asked their young respondents to imagine that a young unmarried girl finds she is pregnant by a boy she likes but does not love. What should she do? Only one-fifth of the sexually experienced among the respondents chose "end the pregnancy" as their solution, but 63 percent of those who made that choice had used contraception at last intercourse as compared with 35 to 49 percent of their counterparts who chose other solutions to the pregnancy. The researchers concluded that teenagers "presumably favorable to abortion are also those more likely to be current users of contraception."²⁴ Interestingly, a study of teen-

agers who had come to a family planning clinic for the first time showed they had more accurate information about abortion than about other methods of fertility control.²⁷

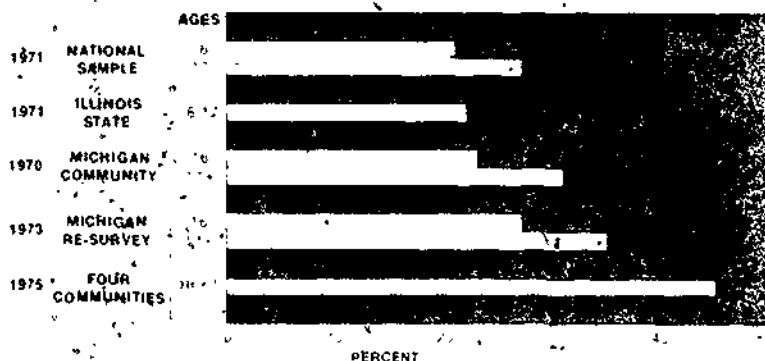
Sexual Activity

The Johns Hopkins study found that 28 percent of their unmarried teenage respondents had had sexual intercourse at least once, with the proportion increasing from 14 percent of those aged 15 at the time of the survey (1971), to 46 percent of those aged 19.²⁸ Different studies of this topic report slightly different proportions, but there is considerable similarity as seen in Fig. 5.

These data also support the popular notion that sexual activity among unmarried teenagers is becoming more widespread. In addition, there is some indication that sexual activity is beginning at earlier ages. In the Johns Hopkins survey of 1971, of the girls who were 19, only 3 percent reported having been sexually active before age 15, but of the girls then aged 15, 9 percent had had sex before age 15.²⁹ A study based on junior and senior high school students in Michigan found that in 1970, 16 percent of the girls were sexually active. In a comparable survey in 1973 the figure had risen to 22 percent.³⁰

The United States has a long history of a double standard regarding sexual activity, but the tradition may be crumbling. Many studies report similar percentages of sexually active teenaged males and females, although a four-community study carried out in 1975 under the auspices of the American Public Health Association still found considerable differences among 16- and 17-year-olds. Sexual experience was reported by 67 percent of the males, and only 45 percent of the females. These are also the highest rates recorded in any of the studies reviewed.³¹

Figure 5. Percent of Unmarried Teenage Women Who Have Had Sexual Relations: Various Recent U.S. Surveys



The phrase "sexually active" should be used with caution in regard to teenagers. Most studies conclude that the monthly frequency of intercourse is low. Kärntner and Zelnik report that 36 percent of the sexually active female respondents had not had intercourse in the previous month, and the American Public Health Association study found that 15 percent of the sexually active students (both males and females) had not had intercourse in the preceding three months. Kärntner and Zelnik also report 30 percent as having they had intercourse only once in the preceding month and only 14 percent having intercourse six or more times.

Another way to look at premarital sexual activity is by the number of partners involved. To judge from these surveys, most teenagers continue sexual relations to one partner, very often the person they intend to marry. This was true of three-fifths of the sexually experienced women interviewed in the John

Hopkins survey. As might be expected, however, the proportion declines with increasing age. Seventy percent of the white 15-year-olds had had only one partner compared to 60 percent of the 19-year-olds. The Michigan study of 1970 recorded only one partner for 64 percent of the sexually experienced girls and 41 percent of the boys, although there was a slight trend toward more partners in the companion survey of 1973.

Racial comparisons

Sexual behavior is another area where racial differences are very evident. According to the Johns Hopkins survey data presented in Table 8 (p. 16), black unmarried teenage women are far more likely than their white counterparts to ever have had sexual intercourse, especially at younger ages. Among the 15-year-olds, nearly three

times more blacks (32 percent) reported having had sexual relations at least once than did whites (11 percent). The racial difference narrowed considerably between the high levels of sexual activity reported by 19-year-olds—81 percent for blacks versus 40 percent for whites. These differentials could not be explained by social class differences between the two racial groups.

The survey data also suggested, however, that for many black girls sexual experience is less frequent and less indiscriminate than it is for those white teenage girls who do engage in such activity. Among the sexually active in both groups, more whites (46 percent) reported having had four or more partners than did blacks (11 percent), though equal proportions (60 percent) had had only one partner. Blacks were also slightly less likely to have had intercourse during the month preceding the survey.³²

Evidence from the 1975 American Public Health Association study suggests that among sexually experienced teenage males first intercourse also occurs at considerably earlier ages for blacks than it does for whites.

Table 8. Percent of Sexually Experienced Unmarried Teenage Women, by Age and Race: 1971

Age	Black	White	Total
15	32	11	14
16	46	18	21
17	57	22	27
18	60	34	37
19	81	40	46
Total	54	23	28

Source: Mahyn Zeinik and John F. Karliner, "Sexuality, Contraception, and Pregnancy Among Young Unwed Females in the United States," in *Research Reports*, Vol. 1, Commission on Population Growth and the American Future (U.S. Government Printing Office, 1972) Table 1, p. 360.

Patterns in Conceptions

We have seen that the birth rate for U.S. teenagers has declined, but since there are a large number of girls getting abortions it is not clear whether teenage girls are getting pregnant at a faster or slower rate than in the past. A rough estimate of the conception rate for teenage girls may be made by relating the annual total number of births plus abortions in this age group to the total number of women in the same age bracket, as follows:

$$\frac{\text{births + abortions to girls 15-19 in year X}}{\text{total population of girls 15-19 in year X}} \times 1,000$$

We shall assume that the rates of spontaneous abortion and stillbirths remain the same and can thus be ignored in estimating changes over time. Abortion data for the years before the Supreme Court decision on abortion are lacking but we can make some assumptions. First, we may assume that there were no abortions in 1960 to balance against the estimated 283,000 obtained by women aged 15-19 in 1974. Although, this assumption is clearly untenable, it is used because it is least likely to show a decline in the conception rate. Nevertheless, under this assumption the rate of pregnancy for girls 15-19 would have declined by 4 percent between 1960 and 1974. This provides assurance that rates of pregnancy have declined in this age bracket, but by how much?

At the other extreme, we may assume that the abortion ratio is the same in 1960 and 1974. This would probably yield an overestimate of abortions in 1960 when the procedure was virtually illegal and therefore difficult to obtain. Under this assumption, the rate at which girls aged 15-19 became pregnant would have declined by about 36 percent from 1960 to 1974. We can surmise, then,

that the actual drop in the pregnancy rate is probably between 4 and 36 percent. Since it appears that more teenagers are sexually active, these figures may underestimate the decrease in the incidence of pregnancy among those who are sexually active. To put it another way, these figures suggest that there has been an improvement in the effectiveness of contraceptive practices among 15- to 19-year-olds.

Applying these same calculations to data for very young girls aged 10 to 14 yields a dramatically different picture. While the actual difference is unknown, it is likely that conception rates have increased between 47 and 250 percent in this age group over the same period.²² Young teens have apparently increased their sexual activity without a concomitant improvement in contraceptive practice. Let us now look at the contraceptive behavior of adolescents.

Patterns of Contraceptive Practice

The extent to which sexual activity leads to pregnancy and the need for decisions about abortion or adoption is, of course, dependent upon the use of contraceptives. Adolescents do not appear to have consistent patterns of contraceptive practice, nor do they rely on the most dependable methods. To complicate the picture, the suitability of some popular methods for teenagers is also open to question.

The 1975 American Public Health Association study noted above reported that among their sexually active respondents about half of the females and 70 percent of the males had risked pregnancy at least once. The Johns Hopkins study found that 53 percent of the sexually active girls had not used a contraceptive method for their latest act of intercourse and 16 percent had never used a method. Only 27 percent of these

girls reported always using some form of contraceptive protection. This figure includes those who knew when their fertile period occurred during the menstrual cycle and who avoided intercourse during that time.²³

The sporadic nature of contraception changes somewhat with age. Among the sexually active Johns Hopkins respondents, only 29 percent of the 15-year-olds used a method the last time they had sexual relations, but 59 percent of the 19-year-olds were protected. Contraceptive diligence seems to improve with age and with increased frequency of intercourse. It is not clear whether women feel more at risk because they have intercourse more often and therefore use contraceptives more regularly, or whether some characteristic of the relationship, such as stability and communication, goes hand-in-hand with frequent sexual relations and helps remove some barriers to effective contraception.

The methods used by teenagers vary in the protection they provide against pregnancy. Among the sexually experienced "never-married" women of the Johns Hopkins survey, the most recently used methods were the condom (27 percent), withdrawal (24 percent), and the Pill (21 percent). Blacks were more likely to use the condom and less likely to resort to withdrawal than whites.

Reasons for not contracepting

Many of these young women did not use a method because they did not feel they were at risk of pregnancy. An analysis of the reasons given casts some doubt on their understanding of the relationship between sex and reproduction. The most common explanation for not contracepting was that it was the time of the month when they couldn't get pregnant. However, just two-thirds (67 percent) of the whites, and less than a quarter (23 percent) of the blacks correctly identified the middle of the men-

strual cycle as the fertile time and hence "unsafe" period.³⁵ This proportion is similar to that found in another study of contraceptive knowledge among teenagers.³⁶

Even these figures may grossly overstate the level of knowledge concerning the rhythm method. First, the "middle of the month" is a vague definition of the period of greatest risk. Even a woman with a regular cycle will not locate the time of greatest risk with any accuracy unless she knows that the menstrual period begins with the first day of menstruation, not the last. Teenagers, many of whom do not yet have a fully regular menstrual cycle, are at an additional disadvantage in calculating safe and unsafe periods. Secondly, the study of new mothers in New York City mentioned above revealed that 45 percent correctly stated the period of greatest risk as being the middle of the menstrual cycle, but upon reinterview a year later nearly a third of these gave an incorrect answer.³⁷ Apparently, many women were guessing in the first place. We do not really know what proportion of the young female population correctly understands how to pinpoint the safe and unsafe periods of their menstrual cycles, but the evidence suggests that knowledge is shaky and has probably been exaggerated in research findings.

Some women who do not use contraception believe they are too young to become pregnant. In fact, many young girls do not begin to ovulate at the same time their menstrual periods begin. Since pregnancy cannot occur in the absence of ovulation, scientists believe that many young girls experience a time when, although menstruating, they cannot become pregnant.³⁸ However, no individual young woman is likely to know if she is ovulating or not and since there is considerable variability in post-menarche sterility, counting on it is very unreliable protection against pregnancy. Girls have even been known to become pregnant before having a period. The

age of menarche appears to have declined in the United States over the past century, but the decline has been very slow. As noted, black girls are more likely to begin menstruating at early ages than are white girls. Although three-quarters of both groups are menstruating by age 13 and over 90 percent by age 14, it is unclear whether our high nutritional standards have also shortened the period of post-menarche sterility.

Another reason given for not using contraception is that sex was infrequent, so contraception was not necessary. Frequency of intercourse bears some relationship to the risk of becoming pregnant, but since that risk is not equal throughout the menstrual cycle even low frequency can be associated with risk of pregnancy if it is poorly timed.³⁹

Some adolescents object to contraception on the grounds that it takes the spontaneity out of sexual relations. This may reflect some difficulty in integrating contraceptive planning with a sporadic and unpredictable sex life. In fact, two of the methods most often used by teens—condom and withdrawal—are those most likely to be disruptive of the sex act. These methods are available with a minimum of hassle for the teenager and neither requires that a girl seem "prepared."

While over half of the teenage girls who are contraceptively protected rely on non-medical methods, a sizeable proportion take the pill and many obtain it through family planning clinics. How available are effective contraceptives for teenagers?

Teenagers and Clinical Services

By drawing data from a number of sources, Frederick Jaffe and Joy Dryfoos of the Alan Guttmacher Institute have estimated that as of 1975 more teenagers received family planning serv-

ices from clinics than from private physicians and that only half of the some 4 million women aged 15-19 estimated to be at risk of unintended pregnancy received medical contraceptive services in that year.² They note that it is unprecedented in the United States that more women receive care through a clinic than through a private physician.

In attempting to characterize these teenage patients the researchers observe: "Adult clinic patients are almost entirely low and marginal income women, but the socioeconomic classification of adolescent patients is more uncertain. It seems likely that family planning clinics serve a relatively larger proportion of adolescents than older women from higher income families, but many or perhaps most adolescent clinic patients probably are from low or marginal income strata."³

Jaffe and Dryfoos further report that between July 1, 1975, and June 30, 1976, 30 percent of the 3.8 million patients at organized family planning clinics were teenagers. Almost 10 percent of these 1.1 million teenage patients were 15 or younger. Nearly half had never used contraceptives before enrollment although it is estimated that upwards of 10 percent had had an abor-

tion before attending a family planning clinic. Most teenagers who come to a family planning clinic want and obtain the pill although other methods are available. What are the advantages and disadvantages of the different methods for teenagers?

Choosing Among Contraceptive Methods

The Pill. Oral contraceptives are the single most popular reversible contraceptive method among U.S. women today. Combining high efficacy with use independent of the sex act, the advantages of the pill are clear. There are also, however, significant disadvantages. There are medical indications against its use by women with vascular or clotting problems, diabetes, liver disorders, cancer and other conditions.⁴ Actual pill taking involves medical risks, the most serious known adverse reactions being blood clots, high blood pressure and gall bladder disease. These risks, while increased for pill takers, are still small in absolute terms. More minor problems are weight gain, headaches, and an increase in minor vaginal infections. On the plus side, pill use serves to regularize and shorten menstrual periods and may improve acne conditions by its influence on the hormonal system. Physicians are not in total agreement about the advisability of prescribing a hormonal contraceptive to a girl whose menstrual cycle is not yet regular or whose body is still developing. On the other hand, the list of risks must be weighed against the risk of an unintended pregnancy and possibly abortion.

The pill's major advantage is its high degree of effectiveness in preventing pregnancy, but this is dependent upon its careful taking. A method appropriate for women with established sex lives

²This 4 million represents four out of ten women in the 15- to 19-year-old age group in 1975 and includes 700,000 currently married and 3.3 million never or previously married women. Presented in a report to the Conference on Determinants of Adolescent Pregnancy and Childbearing, sponsored by the Center for Population Research, National Institutes of Health, in Belmont, Md., May 3-5, 1976, the estimate is based on projected increases in the proportion of sexually active, unmarried women aged 15 to 19 since the Johns Hopkins survey of 1971—all of whom are assumed to want to avoid having children while still unmarried—plus estimates of the proportion of currently married women aged 15 to 19 not pregnant or trying to get pregnant derived from the June 1974 Current Population Survey of the Bureau of the Census. The procedure is described in Joy G. Dryfoos, "Women Who Need and Receive Family Planning Services: Estimates at Mid-Decade," *Family Planning Perspectives*, Vol. 7, No. 4 (July/August 1975) pp. 172-179.

and regular daily habits may not be suited to teenagers whose daily routines and sexual activities are apt to be unpredictable. Also, the pill requires a prescription, which means the adolescent must contact a private doctor or clinic. Although many girls make this contact, it undoubtedly takes more motivation than reliance on a drugstore method.

IUD. Another highly effective method, the IUD, may be even less suited to adolescent needs. As with the pill, the IUD requires contact with a physician and is associated with major and minor effects. Relatively minor side effects are pain on insertion, painful menstrual periods and heavy menstrual flow. Major complications range from ectopic or tubal pregnancy while the device is in place, perforation of the uterus on insertion and pelvic inflammatory disease, to pregnancy following spontaneous and unobserved expulsion of the device. The only absolute contraindications against insertion are pregnancy or active pelvic infection.

Most IUDs are not suitable for women who have never borne a child and therefore it is not the method of choice for most adolescents. This disadvantage may be overcome by the newer Copper T and Copper 7. Both offer easier insertion and are better tolerated by women who have never had a baby. As with the pill, the long-term consequences of adopting this type of contraceptive regime early in a woman's reproductive career are not fully known. The IUD is effective in preventing pregnancy, its effect is reversible and independent of the sex act itself, and it requires little continuing attention by the wearer (except for checking that it is still in place).⁴²

Diaphragm. The diaphragm, used with contraceptive jelly or cream, is a reasonably effective method of contraception but is not without its shortcomings. It requires a fitting by a professional and then must be put in place before each act of intercourse. For

teenagers with unpredictable sex lives this can be quite problematic. Furthermore, the "equipment" involved—the device itself, jelly, applicator for additional jelly and possibly an inserter—must be kept by the woman. If a teenager is hiding her sexual and contraceptive activity from her parents this could be a disadvantage.

A major advantage to the diaphragm and jelly is that there are no negative side effects. Many women find they adapt to the routine of inserting the diaphragm and can use it with confidence and freedom from fear of side effects.⁴³ A recent study in a New York clinic demonstrated extremely high effectiveness even among teenagers, when they were properly informed about how to use the diaphragm and motivated to avoid pregnancy.⁴⁴

Condom. Often criticized for being unaesthetic or unreliable, the condom has many features to recommend it, especially for teenagers. Used correctly this method is quite effective in preventing pregnancy especially when used, along with foam. It requires no physician contact, is widely available and has no negative side effects.⁴⁵ It does require preparation before each sexual act but not so much as the diaphragm.

Unfortunately, teenagers seem to have many erroneous ideas about the condom. In one study of teenagers' knowledge about sex and contraceptives, 48 percent believed that condoms break easily, although this is not true. After an instruction period the teenagers were re-tested and this question was still incorrectly answered by many.⁴⁶ Many teenagers accord the condom a low rating for reasons that are not clear. Perhaps some notions—even distorted ones—are so deeply entrenched in teen culture that they are difficult to change, or perhaps teenagers' beliefs are based on bad experiences with the condom as a result of inadequate information on how it should be used.

Since condoms are readily available—

albeit sometimes requiring a "Summer of '42" style episode to obtain—and offer good protection when used correctly, they are well suited to teenagers' sex lives. The condom also offers protection against venereal disease which is a serious health problem for teenagers as we shall see further on.

Withdrawal. Withdrawal is often used by teenagers and cannot be ignored as a contraceptive method. It was probably chiefly responsible for the historical decline in European fertility in the 1800s and early 1900s.⁴⁷ Nonetheless, there are several drawbacks to the method. Foremost of these is its unreliability which may be exacerbated by the teenage male's lesser control over his sexual response. On the plus side is its ready availability, with no "supplies" to obtain or hide. Also it is free, which may be an important factor for teens. There are no medical side effects of withdrawal but it may produce anxiety in both partners.⁴⁸

Foam. Foam, and jellies and creams used without a diaphragm, are used by about 4 percent of married women and an unknown, but probably small, proportion of teens.⁴⁹ These techniques are simpler than the diaphragm and jelly but not as effective. The absence of side effects (except for an occasional sensitivity to a specific brand) may make them attractive and new pre-filled applicators lessen the interruption of sexual activity. Since these methods can be obtained without prescription they may be preferred by a young girl who does not want—or does not know how—to cope with clinics or physicians who deliver family planning services.

Douche. The age-old technique of douching to prevent pregnancy is not widely used except by black teenagers.⁵⁰ While not requiring a physician's intervention or inducing negative side effects, there is little to recommend the douche. To be used properly it involves equipment and must be used immediately after intercourse. The most compelling problem associated with this method is

its very high failure rate.⁵¹

Rhythm. Rhythm—or periodic abstinence—may be based on calendar calculations of the time of ovulation or the more complex but reliable basal body temperature technique. Once the time of ovulation has been established, sexual relations must be avoided for a period of time before and after the estimated date of ovulation. Difficulty in pinpointing the time of ovulation and variability in the lifespan of the egg and sperm introduce a note of uncertainty to this method. Rhythm is a particularly difficult method to use correctly if a woman's menstrual periods are of irregular length. There are no negative medical side effects of the method but its effectiveness is low.⁵²

Few teenagers say specifically that they are using the rhythm method, but 40 percent of sexually active Johns Hopkins respondents not using a method said this was because it was the "time of the month" they would not get pregnant.⁵³ We have already seen that teenagers' ability to even crudely estimate this "time of the month" is poor. Rhythm is a fairly complex method to use. Few teenage women apparently believe they are using it as their contraceptive method although some do use their perception of the anovulatory phase of the cycle as a reason for not contracepting.

The choice of a contraceptive method is not easy for anyone since each regimen has positive and negative features. The choice is undoubtedly more difficult for teenagers who may confront problems such as fear of appearing "prepared" for sexual relations, wanting to hide the method from parents, poor knowledge about the relative risks of different methods, or inability to negotiate the health care system to get help from a private physician or clinic. When we consider that upwards of 4 million U.S. teenage girls are estimated to be at risk of unintended pregnancy the magnitude of the problem is clear.

What of the Males?

There has been a lack of attention to the males involved in adolescent pregnancies. Since it is the female who arrives at a family planning clinic, has the abortion, or bears the child, she is more likely to have come into contact with a record-keeping system that translates her behavior into statistics. Because the woman faces more of the consequences of sexual behavior and has, at least as great, a chance to prevent them as does the male, research has also focused on her. Though understandable, this state of affairs is unfortunate. We know far less about how the male views the risk of pregnancy although he has an opportunity to avert it with contraception. To judge from the Johns Hopkins survey, over half of contracepting teenagers are using male methods—condom and withdrawal—so clearly males have not given up all responsibilities.

While many males do use contraceptives, many others do not. We have seen that some female teenagers fail to use a method because they think they cannot get pregnant and there is evidence that males share those views. Fewer than half the young males surveyed in an urban area could correctly identify the period in a woman's menstrual cycle when she is at greatest risk of pregnancy. Half of the boys questioned also said they felt the girl should be the one to use contraception.⁵⁴ When this is combined with the data on girls the picture is dismal. Both sexes feel that contraception makes sex seem calculated and report that it was not used because of a desire not to deprive the sex act of the spontaneity it is supposed to have. Both males and females appear equally uninformed about the physiology of reproduction and the effectiveness of various contraceptive methods—even those methods which teenagers do use.

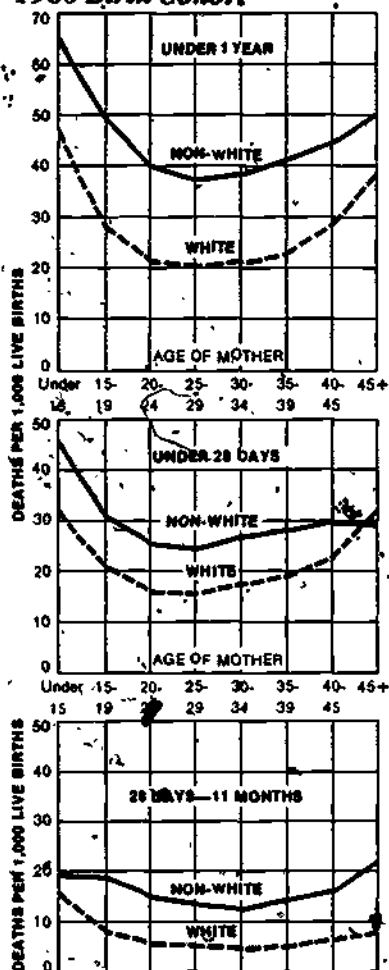
Health Consequences of Adolescent Childbearing

One area of significant risk associated with childbearing during the teenage years is health—health of the mother and health of the baby. The risks involved start with the pregnancy itself. Serious complications of pregnancy such as toxemia (a condition which causes hypertension), pre-eclampsia, and prolonged labor are all more common among teenagers than older women. While some of these difficulties may result from poor diet or prenatal care, others are related to the physical immaturity of the woman. The risk of fetal loss is not particularly high for a teenager bearing a first child, but is much greater if she is having a second or higher order birth.⁵⁵

Both the adolescent who gives birth and her baby are at greater risk of death than is the case with a woman in her twenties. The maternal mortality rate is highest for girls under the age of 15 and still quite high for girls aged 15 to 19. The only other age group that approaches these rates comprises women 40 to 49. The risks of late childbearing are generally known, but the risks from very early childbearing are also serious.⁵⁶

Jane Menken draws attention to data on the 1960 U.S. birth cohort which reveal that among both whites and non-whites a similar pattern exists for mortality risks to the baby (Fig. 6). The differences in risks are far greater in the first month of life than in the remainder of the first year. Menken remarks "Just after birth, when biologic factors related to the pregnancy are the primary determinants of survival, risks to infants of younger mothers are much higher than those to infants of older mothers in both

Figure 6. Infant Mortality Rates by Age of Mother and Race: United States, 1960 Birth Cohort



Source: Committee on Maternal Nutrition, Food and Nutrition Board, National Research Council, *Maternal Nutrition and the Course of Pregnancy* (Washington, D.C.: National Academy of Sciences, 1970) p. 144.

color groups."⁵⁷ If a teenager is "having her second or third baby the mortality risks for the baby are even higher.

One problem associated with assessing the health risks of adolescent childbearing is that data are often presented in live-year age groups, such as 15-19. This obscures the differences between young teenagers, and older teens. The health risks for a woman aged 18 or 19 are not much different from the risks for a woman in her early twenties, but the risks for the 15- or 16-year-old are considerably greater. Within the 15-19 age group the risks from pregnancy and childbirth are greater the younger the mother. Also, the risks generally increase with parity so that, while an 18-year-old may not be at any appreciable risk if bearing a first child, the 18-year-old who is pregnant with a second child may experience considerably increased health risks.⁵⁸

Low birth weight

One explanation for the higher mortality rates among babies born to teenagers is the greater incidence of low-birth-weight infants. Teenagers are more likely than older women to give birth to a baby weighing 2,500 grams or less and the risk of death for such an infant is considerably higher than for a baby born weighing more than 2,500 grams (about 5½ pounds). Table 9 (p. 24) shows the probabilities of a low-birth-weight newborn according to maternal age and racial group. Nonwhite mothers have a greater risk than whites of bearing a low-birth-weight baby at all ages, but the young girl, white or nonwhite, is at the greatest risk.

Besides increased mortality risks, low birth weight is related to a number of developmental problems for the infants involved, including cerebral palsy, epilepsy and mental retardation. Of course, not all low-birth-weight babies suffer these complications, but the risk is clearly increased.⁵⁹

Table 9. Percent of Low-Birth-Weight Infants by Age of Mother and Race: United States, January-March 1967

Age of Mother	Total	White	Nonwhite
under 15	17.2	12.5	19.5
15-19	10.5	8.5	15.7
20-24	7.7	6.7	13.2
25-29	7.2	6.5	11.8
30-34	7.9	7.0	12.6
35-39	9.1	8.3	13.3
40-44	9.6	9.1	12.2
45 and over	8.6	8.1	10.8
Total	8.2	7.1	13.6

Source: Helen C. Chase. "Trends in Prematurity: United States, 1950-1967." *American Journal of Public Health* Vol. 60 (1970) Table 8, p. 978.

There is one small bright spot in the catalogue of health problems associated with early motherhood. Women who bear their first child before the age of 18 apparently have a decreased risk of breast cancer. For them, this risk is one-third that for women who wait until age 35 to begin a family.⁴⁰ Few women want to wait until age 35 to start their families—a time when other hazards increase—and this one advantage to a teenage first birth is minimal compared to the benefits associated with bearing a first child between the ages of 20 and 24.

Teenage Health and Sex

Pregnancy and childbearing are not the only health "risks" run by sexually active adolescents. Teenagers now feature prominently in the U.S. statistics on venereal disease. Although the rate for syphilis has declined dramatically in the

past 30 years, the rate for gonorrhea has risen. Close to a million cases of gonorrhea were reported across the nation in 1975. When under-reporting and under-diagnosis of cases are considered, the Center for Disease Control estimates that there are upwards of 2.6 million cases annually, or about one new infection every 12 seconds. While men still account for about 60 percent of the reported cases, the rate for women is now mounting faster than that for men. Highest rates are found among 20- to 24-year-olds, closely followed by rates among 15-19 year-olds. The rate of infection by gonorrhea has about tripled since 1956 and now stands at 1.216 cases per 100,000 population for teenagers—three times the overall rate of 429 for the country.⁴¹

The complications of gonorrhea are serious and may result in sterility. One disturbing characteristic of the condition is that it is often without symptoms in women. Also, gonorrhea must be diagnosed through a smear rather than an easier to obtain blood test, although scientists are working on a blood testing technique.

As for syphilis it has not been eradicated, but relative ease of detection and cure, along with generally understood symptoms, makes this an easier disease to control. The risk of syphilis is highest for young adults (20-24) but teenagers, with 19.5 cases per 100,000, are still above the national rate of 12.1.

Other medical problems that are sexually transmitted are infections in the genitals, such as nonspecific urethritis, trichomoniasis, and genital herpes. All are believed to be on the increase. Since reporting of these to the Center for Disease Control (CDC) is not required, it is difficult to assess how widespread they are, but the CDC puts the annual total of trichomoniasis alone at 3 million cases.⁴² Sweden has registered a decline in venereal disease, which may be due to high rates of condom use. Denmark, where living conditions and cul-

ture are quite similar, has had no such reduction in V.D., nor does it have high rates of condom use.

It is quite likely that health risks other than venereal disease accompany early sexual activity. I. D. Rotkin found age at first sexual intercourse to be the factor most closely associated with risk of cervical cancer for women. This relationship holds regardless of sexual frequency, number of partners, and whether or not a woman's partners had been circumcised. Adolescence appears to be the period of greatest susceptibility but the long latency of cervical cancer means the disease may not surface for several decades. The hypothesis proposed by Rotkin is that, in its high growth state when cells are dividing, the cervix of a female teenager is particularly vulnerable to viral agents which may be transmitted by a sexual partner. While the evidence for this hypothesis is not complete, it is consistent with other evidence regarding the development of cancer. Use of the diaphragm or condom are two methods of short-circuiting this sequence of events.⁴³

Child Development

Some data are available on the effects of early parenthood on the later development of the child or children involved. In an extensive review of pregnancy outcome and child development as related to parental age at birth, Dorothy Nortman reported on a study which found childhood mortality at ages 1-4 to be 41 percent above average among children born to adolescent mothers, with a rapid decline as the age of the mother increased. She noted that accidents are an important cause of childhood deaths, and the implication is that teenagers may be too immature to act as responsible parents.

She further cited a Canadian study which showed an increased prevalence

among adolescent mothers—especially for high parity women—of handicapped children. And a study of mental defectives found them over-represented among mothers under the age of 20 and among mothers over the age of 35.⁴⁴ As with many such problems, there is a J-shaped curve of risk. Risk is elevated for young mothers, lowest for women in their twenties and higher for older mothers.

Dr. Janet Hardy has reported data from the Johns Hopkins Child Development Study on the development of 525 children born to girls who were 16 years or less at the time of delivery. At age four, 11 percent of the children scored 70 or below on IQ tests compared to only 2.6 percent of the general population of four-year-olds. While in the general population approximately a quarter of four-year-olds will demonstrate an IQ of 110 and above, only 5 percent of the children born of very young mothers tested that high. Dr. Hardy noted that school failure and behavior problems are also more prevalent among the study population. "Other serious problems such as child abuse, delinquent behavior and early pregnancies among the children themselves have been encountered. Yet, some of the young mothers and their children have been successful. These mothers have completed their schooling, hold good jobs, have established satisfactory family life and their children are doing well and should be successful also."⁴⁵

To say that there are greater risks for children born to adolescent mothers does not mean, of course, that all such births will lead to problems any more than to say that delaying a birth until the twenties will guarantee that child a splendid life. We can say that the risk of negative outcomes for the pregnancy, the birth, or for the child's development, are higher the younger the mother. Postponing a birth until a woman is in her twenties offers noticeably decreased risks in all respects.

Life Chances for a Teenage Mother

A birth during adolescence has an effect on many other aspects of a woman's life besides her health, and the effect is generally negative. What does becoming a mother as a teenager imply for a woman's education, her potential employment and earnings, and her future childbearing?

Education

Pregnancy and motherhood are major reasons for girls leaving school. Of course, some girls drop out of school and then become pregnant, but that is not the usual case. One analysis has shown that only 20 percent of the women who bore a child before the age of 18 completed high school. This study found very little difference between black and white women in this respect.⁶⁶

Title IX of the Education Amendments of 1972 (effective July 12, 1975) prohibits schools which receive federal funds from excluding any student on the basis of pregnancy or a pregnancy-related condition. Even so, the extent to which young women stay in school during pregnancy or are able to return after a birth varies widely. The demands of child care may make it difficult for some new mothers to remain in school, even if they are not barred by school policy.

The New York study of new mothers found that of those who had not completed high school, 27 percent were in school after the birth, and over half (56 percent) wanted to go further in school. Interestingly, the proportion who were in school or wanted to go further was about the same for those who had not completed high school as for those who had. These young mothers are not without educational aspirations, but they are not completely successful in achiev-

ing them, either. It seems plausible that more of these young women would be in school had it not been for an early first birth.⁶⁷

It is clear that pregnancy and birth have a negative effect on a woman's education but it is difficult to say how much of the deficit is made up later in life. The effect of a birth may also vary with the age of the mother. A girl who is only 15 when her baby is born may not be expected to assume full responsibility for the baby and therefore be able to continue in school while a relative, perhaps her mother, cares for the child. A girl of 17 is more likely to take on the full role of mother and perhaps wife and find that she does not have the time or energy to cope with school in addition.

Employment and earnings

Earnings are generally a function of formal schooling and on-the-job experience. The girl who bears a child while still an adolescent is likely to both interrupt her school and make it difficult to find work because of her child care responsibilities. It is difficult to assess the exact impact of a teenage birth on labor force participation, occupation and earnings; but it is clear that women who begin childbearing in their teens have disturbed the process, by which one achieves success in the market place. A long-term study of family incomes among Detroit couples found persistently lower earnings and assets among couples who had married when the bride was already pregnant compared with those who had not. This reduced economic achievement was not the result of shorter duration of marriage, younger age at marriage, or social status of the parents.⁶⁸

Fertility

Numerous studies report that the earlier a woman begins her family the more children she is likely to have. This ap-

parently results not from a desire for more children but from having more unplanned births. The New York study of new mothers found that only 20 percent of the teenagers had planned their births as compared to 70 percent of the women who were 24 to 29. The teenage mother is less likely to intentionally embark on motherhood for her first birth and the pattern may repeat itself with later pregnancies.

Bonham and Placek report data from the 1973 National Survey of Family Growth regarding family size expectations for women who had their first child at ages under 18, 18-19 and older. The younger the woman at the time of her first birth, the more children she eventually expected to have (Table 10).

Divorce

Among married teenage women, who have most of the births to teenagers, does childbirth affect the stability of marriage? Couples who marry before the woman has reached age 20 have much higher rates of divorce than those who marry later, but one analysis based on the 1970 National Fertility Survey does not show significantly increased risk of divorce because of an early birth.²² There is an adjustment by a married couple to the arrival of a first baby and there is an increased economic burden. These adjustments must be more difficult for a young couple when the birth is likely to be unplanned, and there has been less time for the couple to adjust to married life and accumulate economic resources. However, the teenage birth does not in itself doom the teenage marriage. The explanation for this may simply be that early marriages suffer considerable strains regardless of whether or not there is an early birth. On the other hand, it is not accurate to conclude that teenage pregnancies have no association with divorce since such pregnancies undoubtedly often precipitate early mar-

Table 10. Total Births Expected per 1,000 Ever-Married Mothers by Age at First Birth: 1973

Age at first birth	Births expected per 1,000 ever-married mothers
Under 18 years	3,766
18-19 years	3,224
20-21	3,050
22-24	2,787
25-29	2,494
30+	2,144

Source: Gordon S. Bonham and Paul Placek. The Impact of Social and Demographic Maternal Health and Infant Health Factors on Expected Family Size: Preliminary Findings from the 1973 National Survey of Family Growth and the 1972 National Natality Survey. Presented at the Population Association of America meeting Seattle, Wash., April 1975.

riage. The National Fertility Survey analysis did, however, show that women who already had an illegitimate child at the time of marriage had a higher risk of divorce regardless of their age at marriage.

Suicide and child abuse

Other consequences of early childbearing may include the risk of abuse for the child or suicide for the mother. Both are plausible since the teenage mother is often raising a child under stressful circumstances. The child is often unwanted or at least unplanned, the mother may not have the support of the child's father or the social support available to older mothers. The woman by virtue of being less mature may be less prepared for the demands of motherhood. The data to support these hypotheses are not extensive, however. Gabrielson and colleagues have reported that the incidence of suicide is more frequent among teenage mothers than non-mothers, but it is not clear if both the

pregnancy and the suicide were related to a common problem which preceded either event.⁷⁰

It is also the impression of people writing in this field that teenage parents are at increased risk of abusing their children but this is difficult to establish.⁷¹ Statistics on child abuse are incomplete and it is questionable that the reporting is unbiased in regard to characteristics of the parent. More research is needed to understand the factors leading to child abuse as well as to assess the range of consequences—good and bad—of teenage childbearing.

Services for Teenage Mothers

It is beyond the scope of this *Bulletin* to catalogue the hundreds of programs in the United States designed to assist school-agers who become parents. These services are in addition to the network of clinics offering family planning and abortion. One may conclude that the availability of services for adolescents has expanded considerably in the past few years but that current programs are not adequate to meet the need. Programs vary widely in what they provide and where they can be found. Urban areas tend to provide a much better array of services than rural areas.

Some studies of programs for school-age parents illustrate a problem that may result when services are designed to achieve only short-term goals. One project contrasted the health of babies born to adolescent mothers who were part of a comprehensive program of pre- and post-natal care with that of children born to similar mothers who were not in such a program. As might be expected, the mothers in the special program had healthier babies. This demonstrated that intervention with nutritional supplements, health care and counseling had a beneficial effect. However, subsequent births

to these same mothers which did not receive such attention showed poorer results. Prematurity, low birth weight, and perinatal mortality were all significantly higher among the 103 subsequent births than among the 180 index infants.⁷²

Perhaps a more common problem with short-term goals of programs for young mothers is found with those designed to help pregnant teenagers stay in school. Such a program may be able to assist a girl through the difficulties of continuing in school during pregnancy, getting health care and planning for the baby, and then find that once she has had the baby her child care problems keep her from returning to school and graduating.

Women who first bear a child as an adolescent may encounter medical, developmental and social problems at that time and with that child, but the increased risks may apply to later-born children as well. An intervention program that ameliorates some of these problems is valuable, but the problems may be persistent. The later-born child may still be affected by the mother's or father's truncated education, diminished occupational skills, marital disruption or the mother's altered reproductive system.

Service programs have shown that it is possible to help avert some of the negative consequences of early pregnancy, but they have also revealed that many problems associated with adolescent childbearing are complex and may require a broad perspective if we are to be successful in ameliorating the consequences.

Consequences for Society

The costs of adolescent sexual and reproductive behavior for society are complex. Behavior which results in health problems generally results in costs not

only to the individual but also to the society, which may subsidize the treatment. Information on the public support of medical care shows that, in 1967, hospital costs for 52 percent of out-of-wedlock births and 10 percent of legitimate births among white women were paid for out of public funds. The corresponding figures for blacks were 76 percent and 40 percent.⁷³ Of course, only about half of out-of-wedlock births are to teenagers, but we may assume that teenagers would be no less likely to need such support and may well be more likely to. According to the 1972 National Natality Survey, one third of the women under 18 having a legitimate birth in that year had their hospitalization paid in part or fully by an agency or organization. The percentage falls to 25 for women 18-19, and decreases steadily as age increases to less than 10 percent for mothers 35 and over. This payment may have been from public sources or the military. Conversely, the proportion of women having hospital bills paid by private insurance rises steadily with the age of the mother.⁷⁴ These data are not surprising—they only confirm what logic would imply—that the young mother, married or not, is less likely to be economically established and able to pay for her health care.

For the adolescent mother who bears a child the costs, of course, do not end with delivery. To cite again the New York City study of new mothers, it was found that more than half (55 percent) of the teenage respondents were in households receiving public assistance as opposed to 17 percent of the mothers aged 20-23 and 9 percent of those aged 24-29. Public assistance may be the means by which young mothers are able to return to school, for this same study showed that of the teenage mothers enrolled in school, three-fourths were in households receiving public assistance. Since these are the girls least likely to be able to find a job, such assistance may be the most constructive reaction

to an untimely first birth. The women who received public assistance after the first birth were less likely than other women to have another baby in the follow-up period of the study. While these data do show that many young girls are in households receiving public assistance after the birth there is no evidence that such assistance results in more rapid second births.

The cost accounting for adolescent pregnancy and childbearing is quite complex and incomplete. It is difficult to assess all of the costs, direct and indirect, that the individual and society may bear. It is also difficult to assess the cost of all alternative courses of action. However, it is generally agreed that family planning services are "cost-effective" in that they are less expensive than the consequences of pregnancy and childbirth. This cost-effectiveness undoubtedly carries over into the non-economic sphere since the emotional costs are far less for contraception than for bearing an unwanted child, or an unplanned child that leads to a precipitate marriage, reduced educational and occupational opportunities, or other consequences.

International Comparisons

How does the United States compare with other countries in regard to teenage reproductive behavior? Many developing countries exceed this nation in the proportion of adolescent women who are married, or the extent to which childbearing takes place during the teenage years. However, the level of teenage reproductive activity in the United States exceeds that of other developed, or industrialized countries. In highly industrialized Japan, for example, teenagers account for only 1 percent of births in contrast to nearly 20 percent

Table 11. International Comparisons of Childbearing and Marriage Among Teenage Women

Country	Birth rate of women under 20 ^a	% all births to women under 20 ^a	% illeg. births to women under 20 ^b	% marriages to women under 20 ^a
United States	68	19	25	33
England and Wales	50	11	21	26
Sweden	33	7	60	7
Japan	5	1	5	3
France	26	7	17	20
Chile	70	15	30	31

Sources: United Nations, *Demographic Yearbook* 1968 (Table 25), 1972 (Tables 6 and 17), 1974 (Tables 10 and 12)

^a1971-1973 ^b1967, 1968

in the United States. England, which is culturally quite similar to the U.S., reports only 11 percent of births occurring to teens, and the figure for Sweden is 7 percent (Table 11). Of course, the proportion of births attributable to teenagers is influenced by birth rate trends among older women as well as teenagers themselves. As we have seen, the greater downturn in the former have had much to do with the increase in the teenage proportion of all U.S. births in recent years.

Data for international comparison are available for approximately the same time periods from the United Nations *Demographic Yearbooks*. Table 11 gives several measures of teenage reproductive behavior for the United States and five other countries. There are large differences which reflect social and cultural variations in the propensity for adolescents to marry, bear children and have children out of wedlock. It is not surprising that the studies that are available infer similar rates of sexual activity among adolescents in the United States and Britain or that rates for Japanese teenagers are much lower.²³

The pressures that exist to restrain from or engage in sexual relations and

the extent to which intercourse leads to pregnancy and birth vary from country to country. Sanctions against abortion or against bearing a child out of wedlock also vary and influence the availability of birth control and abortion services, as well as the extent to which pregnant adolescents marry.

The Outlook

To sum up, there is justifiable concern about adolescent childbearing because of the negative outcomes so often experienced by the mother, child, and others involved. It is difficult to find anything that is not better when birth is postponed. In one sense the "problem" of adolescent childbearing is diminishing in the United States, for we can see substantial declines in the birth rate for most teenagers. However, the declining rate for older teenagers is coupled with rising rates for younger teens and the rates for nonwhite girls remain substantially higher at all ages than for whites. The very large numbers of U.S. teenagers today means that, even with declining rates, there are large numbers of

births to teenagers. Thus, the magnitude of the problem has not diminished greatly, if at all.

Adolescent childbearing is clearly a risk for the young teenager. A girl who is 18 or 19 does not face particular biological risks from a pregnancy, but a younger girl does. The social consequences—for the parents and children—of too early childbearing are also negative. While the general picture is clear, the details about magnitude and reversibility of effects remain for future research to clarify. Such research will hopefully turn from the myopic view of adolescent childbearing and look at people other than the mother. The effects on the father, on the extended family which may be called upon to help raise the child, and on society should receive more attention than they have to date.

Childbearing is only one aspect of the whole issue of teenage fertility-related behavior reviewed here. Rates of sexual activity are apparently increasing for adolescent women. Even so, sexual activity is not typical of teenagers, except for older, and especially black teenagers. Given the sporadic nature of sexual activity among adolescents it is difficult to say just what "sexually active" means.

Most of the teenagers who are sexually active make at least some attempt to avoid pregnancy. This does not, however, mean consistent use of the most effective contraceptives. The general

unpredictability of their sexual activity, misconceptions about the risk of pregnancy, personal and intra-couple barriers to contraceptive use, and barriers to contraceptive services all combine to make contraception for adolescents a difficult experience. Moreover, in seeking protection from unwanted pregnancies adolescents find—as do adults—that there is no perfect contraceptive. Methods differ in their intrinsic ability to prevent conception, but they also differ in what they require from the user in order to make the method successful. Methods that seem ideal for adults may be inappropriate for adolescents.

Despite attitude survey findings which indicate adult approval for the provision of family planning services to teenagers,¹ this service is not uniformly available for adolescents. Teenagers perceive problems in obtaining service and there is reason to believe that the use of contraception would increase with improvements in the delivery of family planning services. Since the effective use of contraceptives is related to understanding the risks of pregnancy and the characteristics of different methods, it seems imperative that improved services to teenagers include an educational component.

There is a great deal of information available about sex, reproduction, contraception, the effects of too early childbearing, services for teenagers, and so forth, but little of it appears to be in the hands of the adolescents involved.

References

1. National Center for Health Statistics (NCHS), *Fertility Tables for Birth Cohorts by Color—United States, 1917-73* (U.S. Government Printing Office, 1976) and "Advance Report: Final Natality Statistics 1974," *Monthly Vital Statistics Report*, Vol. 24, No. 11, Supplement 2 (February 13, 1976).
2. *Ibid.*, and Robert L. Heuser, Chief, Natality Statistics Branch, Division of Vital Statistics, NCHS, personal communication.
3. NCHS, "Final Natality Statistics 1974," *op cit*, Table 9.

- 4 NCHS. "Age at Menarche United States." *Vital and Health Statistics*. Series 11, No 133, 1973
- 5 NCHS. "Trends in Illegitimacy, United States 1940-1965." *Vital and Health Statistics*. Series 21, No 15, 1968, pp 9-36. NCHS. "Final Natality Statistics 1974," *op cit*, Table 11
- 6 *Ibid.*, Table 9
- 7 Campbell, Arthur A., Deputy Director, Center for Population Research, National Institute of Child, Health and Human Development, National Institutes of Health, personal communication
- 8 Presser, Harriet B. "Social Consequences of Teenage Childbearing," presented at the Conference on Research on the Consequences of Adolescent Pregnancy and Childbearing, Center for Population Research, National Institutes of Health, Bethesda, Md., October 29-30, 1975
- 9 U.S. Bureau of the Census. "Premarital Fertility," *Current Population Reports*, Series P-23, No 63 (U.S. Government Printing Office, 1976)
- 10 U.S. Bureau of the Census. "Population of the United States Trends and Prospects 1950-1990," *Current Population Reports*, Series P-23, No 49 (U.S. Government Printing Office, 1974)
- 11 Parke, Robert, Jr. and Paul C. Glick. "Prospective Changes in Marriage and the Family," *Journal of Marriage and the Family*, Vol. 29, No 2 (May 1967) pp 249-256
- 12 U.S. Bureau of the Census. "A Statistical Portrait of Women in the United States," *Current Population Reports*, Series P-23, No 58 (U.S. Government Printing Office, 1976)
- 13 Anonymous. "Delaying Marriage Leads to Changing Lifestyle for Young People in Scandinavia and the United States," *International Family Planning Digest*, Vol 1, No 4 (December 1975) p 9
- 14 U.S. Department of Health, Education, and Welfare. Social and Rehabilitation Service, National Center for Social Statistics. *Adoptions in 1974*. NCSS Report E-10(1974), April 1976
- 15 U.S. Senate. *School-Age Mother and Child Health Act, 1975 Hearings before the Subcommittee on Health of the Committee on Labor and Public Welfare*. 94th Cong., November 4, 1975 (U.S. Government Printing Office, 1976) p 487
- 16 U.S. Department of Health, Education, and Welfare. *op cit*
- 17 U.S. Department of Health, Education, and Welfare. Social and Rehabilitation Service, National Center for Social Statistics. *Adoptions in 1971*. NCSS Report E-10(1971), May 1973
- 18 Berkov, Beth and June Sklar. "The Impact of Legalized Abortion on Fertility in California," *Preliminary Papers Results of Current Research in Demography*, No 1 (Berkeley, Cal. International Population and Urban Research, University of California, 1972) p 78
- 19 U.S. Center for Disease Control. *Abortion Surveillance 1974* (April 1976)
- 20 Weinstock, Edward, Christopher Tietze, Frederick S. Jaffe, and Joy G. Dryfoos. "Abortion Needs and Services in the United States, 1974-1975," *Family Planning Perspectives*, Vol 8, No 2 (March/April, 1976) p 58
- 21 U.S. Center for Disease Control. *op cit*
- 22 Pakler, Jean, Frieda Nelson, and Martin Sygrr. "Legal Abortion: A Half-Decade of Experience," *Family Planning Perspectives*, Vol 7, No 6 (November/December, 1975) Table 10, p 252
- 23 Institute of Medicine. *Legalized Abortion and the Public Health* (Washington, D.C. National Academy of Sciences, 1975) pp 88-99. Athanasiou, Robert, et al. "Psychiatric Sequelae to Term Birth and Induced Early and Late Abortion: A Longitudinal Study," *Family Planning Perspectives*, Vol 5, No 4 (Fall 1973) pp 227-231
- 24 Menken, Jane. "The Health and Demographic Consequences of Adolescent Pregnancy and Childbearing," presented at the Conference on Research on the Consequences of Adolescent Pregnancy and Childbearing, Center for Population Research, National Institutes of Health, Bethesda, Md., October 29-30, 1975
- 25 Russell, J. K. "Sexual Activity and its Consequences in the Teenager," *Clinics in Obstetrics and Gynecology*, Vol 1, No 3 (December 1974) pp 683-698

26. Kantner, John F. and Melvin Zelnik, "Contraception and Pregnancy Experience of Young Unmarried Women in the United States." *Family Planning Perspectives*, Vol. 5, No. 1 (Winter 1973) p. 26.
27. Reichelt, Paul A. and Harriet H. Werley, "Contraception, Abortion and Venereal Disease Teenagers' Knowledge and the Effect of Education." *Family Planning Perspectives*, Vol. 7, No. 2 (March/April 1975) pp. 83-88.
28. Zelnik, Melvin and John F. Kantner, "Sexuality, Contraception and Pregnancy Among Young Unwed Females in the United States." In *Research Reports*, Vol. 1, Commission on Population Growth and the American Future (U.S. Government Printing Office, 1972) pp. 355-374.
29. Kantner, John F. and Melvin Zelnik, "Sexual Experience of Young Unmarried Women in the United States." *Family Planning Perspectives*, Vol. 4, No. 4 (October 1972) p. 10.
30. Vener, Arthur M. and Cyrus S. Stewart, "Adolescent Sexual Behavior in Middle America Revisited 1970-1973." *Journal of Marriage and the Family*, Vol. 36, No. 4 (November 1974) pp. 728-735.
31. Brown, Sarah S., E. James Lieberman, and Warren B. Miller, "Young Adults as Partners and Planners," presented at the Scientific Session of 103rd Annual Meeting, American Public Health Association, Chicago, November 1975.
32. Kantner and Zelnik, "Sexual Experience, etc.", *op cit.*, pp. 10-11.
33. Basic data for these calculations were obtained from U.S. Center for Disease Control, *op cit.*; U.S. Bureau of the Census, "A Statistical Portrait of Women," *op cit.*; NCHS, "Final Natality Statistics 1974," *op cit.*; NCHS, *Vital Statistics of the United States 1971*, Vol. 1: *Natality* (U.S. Government Printing Office, 1975), and Weinstock, Edward et al., *op cit.*
34. Kantner, John F. and Melvin Zelnik, "Contraception and Pregnancy," *op cit.*, pp. 21-35.
35. Shah, Farida, Melvin Zelnik, and John F. Kantner, "Unprotected Intercourse Among Unwed Teenagers." *Family Planning Perspectives*, Vol. 7, No. 1 (January/February 1975) pp. 39-44.
36. Reichelt and Werley, *op cit.*, Table 1.
37. Presser, Harriet B., Professor of Sociology, University of Maryland, personal communication.
38. Tanner, J. M., "Development of the Female Reproductive System during Adolescence." *Clinical Obstetrics and Gynecology*, Vol. 3 (1960) pp. 135-145.
39. Shah, Zelnik, and Kantner, *op cit.*
40. Jaffe, Frederick S. and Joy G. Dryfoos, "Fertility Control Services for Adolescents Access and Utilization," presented at the Conference on Determinants of Adolescent Pregnancy and Childbearing, sponsored by the Center for Population Research, National Institutes of Health, Belmont, Md., May 3-5, 1976, p. 12.
41. Hatcher, Robert A. et al., *Contraceptive Technology 1976/1977*, 8th ed (New York Irvington, 1976) p. 41.
42. *Ibid.*, pp. 65-75.
43. *Ibid.*, pp. 33-36.
44. Lane, Mary E., Rosalinda Arceo, and Aquilus Sobrero, "Successful Use of the Diaphragm and Jelly by a Young Population: Report of a Clinical Study." *Family Planning Perspectives*, Vol. 8, No. 2 (March/April 1976) pp. 81-86.
45. Hatcher et al., *op cit.*, pp. 30-32.
46. Reichelt and Werley, *op cit.*
47. Peel, John and Malcolm Potts, *Textbook of Contraceptive Practice* (Cambridge, U.K. Cambridge University Press, 1969).
48. Hatcher et al., *op cit.* pp. 29-30.
49. Westoff, Charles F., "Trends in Contraceptive Practice 1965-1973." *Family Planning Perspectives*, Vol. 8, No. 2 (March/April 1976) pp. 54-56. Kantner and Zelnik, "Contraception and Pregnancy," *op cit.*
50. Kantner and Zelnik, "Contraception and Pregnancy," *ibid.*, p. 27.
51. Peel and Potts, *op cit.*
52. Hatcher et al., *op cit.*, pp. 86-91.

53. Kantner and Zeinik. "Contraception and Pregnancy," *op. cit.*, Shah, Zeinik, and Kantner, *op. cit.*
54. Finkel, Madelon Lubin and David J. Finkel. "Sexual and Contraceptive Knowledge, Attitudes and Behavior of Male Adolescents," *Family Planning Perspectives*, Vol. 7, No. 6 (November/December 1975) pp. 256-260.
55. Menken, *op. cit.*
56. *Ibid.*
57. *Ibid.*, p. 7.
58. National Research Council, Food and Nutrition Board, Committee on Maternal Nutrition. *Maternal Nutrition and the Course of Pregnancy* (Washington, D.C. National Academy of Sciences, 1970)
59. Menken, *op. cit.*
60. MacMahon, B., P. Cole, and J. Brown. "Etiology of Human Breast Cancer: A Review," *Journal of the National Cancer Institute*, Vol. 50, No. 1 (January 1973), pp. 21-42.
61. U.S. Center for Disease Control, *VD Fact Sheet 1975*, 32nd ed. (Washington, D.C. Department of Health, Education, and Welfare Publication No. [CDC] 76-8195, 1976), p. 23.
62. *Ibid.*, p. 20.
63. Rotkin, I. D. "Adolescent Coitus and Cervical Cancer: Associations of Related Events with Increased Risk," *Cancer Research*, Vol. 27, No. 4 (April 1967) pp. 603-617.
64. Nortman, Dorothy. "Parental Age as a Factor in Pregnancy Outcome and Child Development," *Reports on Population/Family Planning*, No. 16 (New York: The Population Council, August 1974)
65. U.S. Senate, *op. cit.*, p. 377.
66. Trussell, T. James. "Economic Consequences of Teenage Childbearing," presented at the Conference on Research on the Consequences of Adolescent Pregnancy and Childbearing, Center for Population Research, National Institutes of Health, Bethesda, Md., October 29-30, 1975.
67. Presser, "Social Consequences of Teenage Childbearing," *op. cit.*
68. Coombs, Lolagene C. and Ronald Freedman. "Pre-Marital Pregnancy, Childbearing, and Later Economic Achievement," *Population Studies*, Vol. 24, No. 3 (November 1970) pp. 389-412.
69. Bumpass, Larry L. and James A. Sweet. "Differentials in Marital Instability 1970," *American Sociological Review*, Vol. 37, No. 6 (December 1972) pp. 754-766.
70. Gabrielson, Ira W. et al. "Suicide Attempts in a Population Pregnant as Teen-Agers," *American Journal of Public Health*, Vol. 60, No. 12 (December 1970) pp. 2269-2301.
71. Westoff, Leslie A. "Kids with Kids," *New York Times Magazine*, February 22, 1976, p. 14.
72. Jekel, J. F. et al. "A Comparison of the Health of Index and Subsequent Babies Born to School Age Mothers," *American Journal of Public Health*, Vol. 65, No. 4 (April 1975) pp. 370-374.
73. Trussell, *op. cit.*
74. Placek, Paul. National Center for Health Statistics, unpublished data from the 1972 National Natality Survey, as reported to the Conference on Research on the Consequences of Adolescent Pregnancy and Childbearing, Center for Population Research, National Institutes of Health, Bethesda, Md., October 29-30, 1975.
75. Illsley, Raymond and R. Taylor. *Sociological Aspects of Teenage Pregnancy* (Aberdeen, U.K.), unpublished manuscript; Asayama, Shin'ichi. *Statistical Investigation of Sexual Development and Behavior in Japanese Students in 1974* (Japanese Association for Sex Education, 1975), abstract.
76. Blake, Judith. "The Teenage Birth Control Dilemma and Public Opinion," *Science*, Vol. 180, No. 4087 (May 18, 1973) pp. 706-712.

Adolescent Fertility Update

(For this May 1977 reprint, Wendy Baldwin has updated the picture of U.S. teenage fertility with material available since the first publication of the Bulletin in September 1976.)

Data for 1975 show continuation of a number of adolescent fertility trends already noted in this Bulletin: (1) overall, birth rates for teens declined from 1972-74 levels, with a rise only in birth rates for very young girls; (2) the number of births to teenagers decreased from 1974; (3) the number of out-of-wedlock births rose among teenagers; and (4) the illegitimacy rate for women 15-19 increased, but only among whites.

The birth rate for women 15-19 continued to decline in 1975, reaching 56.7 per 1,000—3.4 percent lower than in 1974, as seen in the table below. As in the past, the rate of decline varied by age and race. The one-year declines were smallest for the youngest girls and white girls aged 14 actually showed a slight increase (2.3 percent) to a rate of 4.4 births per 1,000. Nonwhites showed no such increase at any age. The declines in fertility rates were slightly greater for nonwhites although

their rates are still substantially higher than those for white teenagers.

A look at the 1970-75 trends shows lowered fertility rates for all nonwhite adolescents and lowered rates for whites 18 and older. Breaking this into first and higher order births, we see that the only rates that are rising are first birth rates for white girls under age 16. First birth rates are down considerably for older white teens and higher order birth rates have fallen for all ages, although somewhat more modestly. Nonwhites show a somewhat different picture. While their fertility rates remain well above comparable white rates, they have registered declines at all ages and parities. Furthermore, the declines have been greatest for higher order births.

Declines in rates are not always accompanied by decreases in numbers but in 1975 the absolute number of births to women under the age of 20 also dropped. The total of 594,880 was 2.2 percent below the 607,978 total of 1974. This decline was completely accounted for by the fall in births to women aged 15-19 since numbers of births to women under 15 actually rose about 1 percent from 12,529 in 1974 to 12,642 in 1975. In 1975, births to women under 20 accounted for 18.9 percent of all births, about the same as in 1974. This proportion varies widely by race, with some 16 percent of white births and 30 percent of all nonwhite births being to women under 20.

Out-of-wedlock childbearing

The total number of out-of-wedlock births in the United States increased by 7 percent between 1974 and 1975, rising to an all-time high of 447,000. Of these, 233,500 were to women under the age of 20, up by 5.6 percent over 1974.

In 1975, 14.2 percent of births to women of all ages were out of wedlock.

Birth Rates for U.S. Teenagers, 1975

Age	Births per 1,000 women		
	Total	White	Nonwhite
14	7.1	4.4	22.1
15	19.4	13.4	51.2
16	36.4	28.1	82.3
17	57.3	45.9	114.5
18	77.5	66.3	138.9
19	92.7	82.2	151.0
15-19	56.7	47.4	107.6
% change 1974-75	-3.4	-3.5	-4.3

Source: Robert L. Meuser, Chael Natsky, Statistics Branch, Division of Vital Statistics, National Center for Health Statistics, personal communication.

Among teenagers, however, 39 percent of all births were out of wedlock, up from 36 percent in 1974. This one-year increase was nearly as great as that registered from 1970 to 1974. The 1975 proportions of out-of-wedlock births were 23 percent for white teenagers, 78 percent for blacks, and 45 percent for adolescents classified as "other."

The 1975 illegitimacy rate of 24.8 births per 1,000 unmarried women aged 15-44 was up 2.9 percent over that of 1974. For 15- to 19-year-olds, the illegitimacy rate went up 4.3 percent to 24.2 births per 1,000 unmarried women. This is the highest such rate ever observed for this age group. From 1974 to 1975 the illegitimacy rate rose slightly (2.3 percent) for women aged 20-24 to 31.6. Because of this reversal of previous trends for this age group, the proportion of all out-of-wedlock births that were to teenagers dropped slightly from 52.9 percent to 52.1 percent. While white rates are lowest, they showed the only increase between 1974 and 1975.

What do these figures mean? Is the "problem" of teenage childbearing over because the birth rates are generally declining? I do not think so. If we are concerned about the women and children (and other family members) who may be affected by a birth to a teenager, the number of people involved has hardly changed from the 1960s when the rates of teenage childbearing were very high. In fact, an increasing number of these births are occurring to the youngest women, those least able to care for a baby and those at the greatest risk of medical complications. Also, the increasing number of teenage out-of-wedlock births may mean that more births are occurring in situations that are problematic to the mother, the baby, and society.

If declining birth rates do not mean the end of the "problem" of teenage childbearing, what do they mean? In 1976, Zelnik and Kantner of Johns Hopkins University again conducted a national survey of fertility-related prac-

tices among women aged 15-19.¹ Comparison of the findings with those of their 1971 survey indicate that premarital sexual activity among women of this age has continued to rise. In 1971, 27 percent of never-married women surveyed reported having had sexual intercourse at least once. By 1976 the figure was up to 35 percent, an increase of 30 percent in just five years.

Increasing sexual activity but declining birth rates among teenagers must mean that teenagers are becoming increasingly able to control their fertility either through contraceptive practices or abortion. The 1976 Johns Hopkins survey did indeed reveal a drop of about one-third over 1971 in the proportion of never-married 15- to 19-year-olds having unprotected intercourse. It also revealed that teenagers are using more effective methods of birth control. In 1976, almost one-third of the sexually active women surveyed used the pill, almost twice the proportion of 1971, and the increase was more dramatic for 15 to 17-year-olds than for the oldest teens.

Despite this encouraging increase in contraceptive practice, a recent review of family planning services for teenagers notes that teenagers are still underserved compared to the overall population of women in need of family planning services.² Also, although abortion services are increasingly available they are not uniformly accessible in all 50 states and adolescents seeking abortion still have more problems than older women. Thus, the improvement in teenage fertility control is being achieved despite imperfect services. How much lower would the birth rate be for teenagers if services were improved?

¹Zelnik, Melvin and John F. Kantner, "Sexual and Contraceptive Experience of Young Unmarried Women in the United States, 1976 and 1971," *Family Planning Perspectives*, Vol. 9, No. 2 (March/April 1977) pp. 55-71.

²Urban and Rural Systems Associates, *Improving Family Planning Services for Teenagers* Contract HEW-OS-36-304, submitted to the Department of Health, Education and Welfare June 1976.

Population Reference Bureau, Inc.

The Bureau gathers, interprets, and publishes information on the facts and implications of national and world population trends. Founded in 1929, it is a private, nonprofit educational organization that is supported by foundation grants, individual and corporate contributions, and memberships. It consults with other groups in the United States and abroad and provides library and information services. Bureau publications include the *Population Bulletin*, the monthly international newsletter *Intercom*, *Interchange* for teachers (5 times yearly), an annual *World Population Data Sheet*, occasional PRB Reports, and special reports and books.

Officers

* Robert M. Avedon, President
Robert P. Worrall, Vice President

Trustees

* Conrad Taeuber, *Chairman of the Board*
* Caroline S. Cochran, *Chairman of the Executive Committee*
* Mildred Marcy, *Secretary of the Board*
* Bert T. Edwards, *Treasurer of the Board*

* Paul F. Bente, Jr., Michael R. Bentzen, Barbara L. Carter, Jacob Clayman,
* James R. Echols, Louis M. Hellman, Kathleen McNamara, Francis X. Murphy, David O.
Poindexter, Patricia Rambach, John Reid, Caroline S. Saltonstall, James H. Scheuer,
William O. Sweeney.

Advisory Committee

Samuel Baum, Calvin L. Beale, Donald J. Bogue, George A. Borgstrom, Lester R. Brown,
Philander P. Claxton, Jr., Mercedes B. Concepcion, Douglas Ensminger, J. George Harrar,
Philip M. Hauser, Snowden T. Herrick, Thomas P. Keahn, David Kline, Malcolm H. Merrill,
Russell W. Peterson, Stephen Vederman, Benjamin Viel

* Members of the Executive Committee of the Board of Trustees



Primary or Secondary Prevention of Adolescent Pregnancies?

James F. Jekel, MD, MPH

It is an appropriate time to reconsider the importance of prevention in health because study after study appears showing less than spectacular resulting benefits from therapeutic health services. Indeed, health, education, and welfare services are being subjected to increasing attack because they are showing signs of collapse in the face of modern demands. In the educational system, urban and rural youth graduate from high school (or drop out), functionally illiterate. The welfare system, instead of supporting families, forces them to break up, and the system is misused by thousands who do not qualify. The health system has failed to keep up organizationally, financially, and educationally with the impact of technology and specialization. In the health field, lip service is paid to quality and continuous, comprehensive, preventive care, but effective examples of these generalizations are difficult to find at a level of study larger than an unusually astute and dedicated individual practitioner.

There are few groups in the population with more needs than young women under 18 years of age, who are still in high or junior high school and are pregnant or have already become mothers. There were slightly more than 250,000 such women in 1973.¹ These young mothers suffer educational and social discrimination, often to the point of ostracism, with the combined effect of poor health for mother and child, educational and economic deprivation, unsatisfactory social and marital lives, and evidence of maternal deprivation (or worse) in the children.

In the middle and late 1960s there was considerable optimism that community attitudes were changing, and that special programs of services to these women, coupled with improved availability of contraception and family life education, would reduce subsequent pregnancies to those already young mothers and would even reduce the rate of young women getting pregnant. This optimism has been replaced in the 1970s by discouragement as the numbers of school age parents have appeared to rise, programs for school age parents are overfilled, and "repeaters" are seen all too often.

These impressions from program people are not in error. Between 1968 and 1973 the number of births to

women under 18 increased from 203,000 to 251,000 per year (a 24% increase in 5 years.)¹ This was due to the greater number of teenagers, but the change in age-specific pregnancy rates was also disappointing. The 15-19 year age group did have a 9% decrease in birth rate from 1968-1973, but this was a far smaller decrease than that for any of the older age groups (eg, the 20-24 year age group had a 28% decrease in the same period). Moreover, the 10-14 year age group showed a 30% increase in age-specific birth rates in the same period of time.

This has led to an increasing cry from those working with school age mothers for "primary prevention," i.e., finding ways to keep girls less than 8 years of age from becoming pregnant. There are, however, theoretical, practical, and cost benefit reasons to question heavy dependence at this time on "primary prevention" of school age pregnancy.

THEORETICAL PROBLEMS WITH PRIMARY PREVENTION

The term "primary prevention" was originated, or at least popularized, in medical circles by Dr. Hugh Leavell, who described three "levels" of prevention (Leavell's levels).² The term was applied to the prevention of disease. First one must ask whether the medical (disease based) model itself is appropriate to apply to early pregnancy. Is this reminiscent of an old era when pregnancy was an "illness"? According to Talcott Parsons, to be socially tolerable, illness, which otherwise is a form of deviance, must be nondeliberate in origin, and the afflicted individual must want to rid herself of the illness and seek competent help to do so. Society, in turn, exempts the person from responsibility for his or her condition, and the person is relieved of normal role obligations. As McKinlay has pointed out,³ it is dubious that any of these four aspects of the Parsonian "sick role" apply very well to pregnancy, which is often wanted, and the help that is sought is to maintain and improve the pregnancy. Moreover, society does hold the woman responsible for the existence of her pregnancy and does not exempt her from most obligations. The exceptions to the latter are if there are

serious complications of the pregnancy (where the concept of illness is easier to accept) or, ironically, in some areas pregnant adolescents are more than exempted from normal role obligations such as school—they are ostracized. MacGregor has emphasized the biological and social disadvantages of treating pregnancy as an illness.¹ In fairness, it should be noted that there are still some who believe pregnancy should be considered a chronic illness.²

Even if the medical model is useful (and that is dubious), one must distinguish between a disease and a symptom or complication of a disease. Is school age pregnancy a disease to be prevented, or is it a symptom of some other problem? There is evidence to suggest that many of these pregnancies are wanted, either because the young woman finds something the needs in closeness with a man or because she believes she can make up for lack of love in her own upbringing by having a child whom she will love and who, in turn, will love her.³ Some persons working with young mothers feel many pregnancies are an attempt by the young mother to ward off an impending depression or intolerable loneliness.⁴ If the pregnancy is not the disease but is a symptom or attempt to solve a problem, there is the danger that preventing one symptom may lead to another. What will take its place: drugs, alcohol, violence, suicide? Are they to be preferred if, indeed, this is the choice? Adolescent mothers already have an inordinately high suicide risk.⁵ Is enough known about the adolescent cultures to promote "primary prevention"? What does this concept mean to adolescents?

Assuming that Leavell's model does have usefulness, primary prevention means preventing the development of the problem first. This may be done in one of two ways:

1. Health promotion. By this Leavell means using general methods of environmental and behavioral change, including good nutrition, sanitation, housing, and education. There seems to be little doubt, since school age pregnancy has a strong socioeconomic gradient, that general social measures, if applied over generations, would have an impact on adolescent fertility, but these changes are not likely to be within the power of a specific "program" to achieve. Klerman,⁶ for example, has emphasized the critical need to provide, early, a meaningful role for young people, including some form of socially useful work and skills, preferably integrated with their educational experiences. Programs for family life education also fit in this category of "health promotion."

2. Specific Protection. The second subheading under primary prevention is "specific protection," i.e., a technically developed "bullet," an intervention with the capability of preventing a specific disease. The prototype in medicine is the vaccine. Are there specific

techniques that can be used to prevent first pregnancies in teenagers? Contraceptives will prevent pregnancies, and abortions will prevent live births.⁷ But in what context can these be offered to young adolescents and to what extent should they be promoted?

Secondary Prevention

Leavell's second level of prevention is detecting the problem early and limiting the disability caused by the problem through effective therapy.

The increasing number of special, often comprehensive, school age parent programs, which are developing around the country (now over 750), are considered secondary prevention. They attempt to limit the medical, social, and educational disability from the school age pregnancy. It must be remembered also that secondary prevention, in the form of effective family planning assistance, may be primary prevention of a rapid subsequent pregnancy, which is especially important for medical reasons.

Ordinarily, in disease, primary prevention is considered more effective and efficient if it can be achieved, but secondary prevention is often the path of least resistance due to demand for services and clarity of the target population. Is this true for school age pregnancy? Is primary prevention more effective and efficient?

PROBLEMS WITH PRIMARY PREVENTION OF SCHOOL AGE PARENTS

There are three major types of primary prevention programs advocated to reduce the numbers of first school age pregnancies. Each of these has problems at the present time.

Family Life and Sex Education

Many believe that an effective curriculum of family life and sex education in the schools would help teenagers understand the consequences of their actions and, if they must be sexually active, at least be more knowledgeable in the use of contraceptive methods. There are several problems with this belief.

First, the author knows of no effective demonstration that family life and sex education programs have a demonstrable demographic impact. Only Sweden has had long term experience with providing sex education for young people, and "the effects of (this) program on sexual behavior and use of fertility control are not clear."⁸ In any case, they would be more likely to be effective if there also was good access to family planning assistance and devices.

Second, in the current social atmosphere, it is unlikely that the majority of communities and school systems will permit an effective family life and sex education program in the near future. What needs to be done first is to establish demonstration programs and determine their effects on fertility and other variables.

Family Planning

There have been attempts to create programs to give sexually active teenagers family planning devices and information.¹⁰ The Mt. Sinai program in Baltimore contained an evaluation of subsequent reproductive performance, which, although lacking a control group, did not show any definite reduction of pregnancies because of the program.¹¹ Drop out rates were high, and among those remaining in the program there was still a moderate pregnancy rate (6 per 100 person-years).

Some persons have questioned the likelihood that school age women, particularly those from low income and limited educational backgrounds, will make effective use of contraceptive methods.¹² In one study, school attendance, not contraceptive use, was the strongest predictor of reproductive performance.¹³

There is a problem with contraceptive programs that concerns the target group. As in many areas of public health, those at highest risk are least likely to use the services. In an evaluation of a teenage family planning program in one medium sized New England city, Fenberg¹⁴ found that almost all the teenagers who used the family planning services came from the surrounding suburbs, and few users came from the inner city target group.

Another problem complicates the provision of contraceptive services for teenagers. In the past the legal rights of minors to seek contraception, abortion, or treatment for venereal disease without parental consent have been questioned. By 1976, 45 states had reduced the age of majority to 18 years; 44 states permitted an 18-year-old to seek her own medical care, almost always including prenatal care and abortion.¹⁵ Nevertheless, there is still resistance in the medical community, particularly in the time of frequent medical malpractice suits, to do what was, until recently, thought to be forbidden by the common law (for judicial opinion).

The problem is even more difficult for women under 18 years, the group specifically of concern in the primary prevention of school age pregnancy. Although a number of states have statutory approval to provide contraceptives to minors under 18 years, for the most part, one must invoke the "mature minor doctrine," which means that a minor "who is sufficiently intelligent and mature to understand the nature and consequences of a treatment which is for her benefit . . ." may give permission for care without parental approval or knowledge.¹⁶ Acceptance of this doctrine is not universal, but it is growing. Physicians nevertheless are still often hesitant to provide services without parental consent to women under 18 years.

Abortion

There is no question that a significant proportion of pregnancies in women under 18 years are now aborted.¹⁷

This proportion may increase as attitudes toward abortion change and if the accessibility of abortion increases in many areas of the country. What is not clear is whether public programs should in any way encourage teenagers to consider abortion or attempt to provide education about abortions as a part of family life and sex education programs. There are serious moral questions involved, and the psychological sequelae of abortions to adolescents are not clear.¹⁸ It would seem that the most that could or should be done, at present, is to increase the accessibility of abortion services for adolescents. Abortion is also sometimes involved in the legal questions about parental consent.

COST-EFFECTIVENESS ISSUES IN PRIMARY PREVENTION

The CDC gave the 1973 abortion ratio for women under 15 years as 1,237 abortions per 1000 live births; a minimum estimate from the same source for the abortion ratio for those 15-17 years would be 600/1000 live births. This means that approximately 40,000 pregnancies occurred to women under 18 years in 1973 and about 160,000 of these (40%) ended in abortion. This was at a time when abortions were not everywhere easily accessible to adolescents, especially without parental consent. It is clear that, regardless of what is thought of abortions from a moral or health point of view, abortions now represent a major form of "primary prevention" of live births to young mothers. It is possible that if legal abortions become unavailable, contraceptives would take their place, but that is doubtful in most cases of adolescent pregnancy.

Under the assumption of no abortions, the problem of school age parenthood would almost double over a short period of time. Congress recently prohibited payments for abortions with Medicaid funds, but the impact of this at the moment is unclear. Therefore, subsequent calculations would assume the fertility rates and abortion ratios that existed in 1973.

It is also likely that the numbers of adolescent deliveries will start dropping in a few years due to the declining cohort sizes, which, in turn, are caused by the falling fertility rates in the 1960s and early 1970s. For the following calculations, cohorts of 4 million young people are assumed in each year of age, of which 2 million are assumed to be young women.

What would be the cost of a family life and sex education program over four years in junior high and high school? Assuming that the average yearly school costs per student in these grades are \$1500 and that 10% of the educational resources would go into the family life and sex education program for four years of their education, the cost would be \$150 per year per student.

¹⁷The CDC reported these only as 339/1000 for age 15-19.

or \$2.4 billion per year (16 million students x \$150 per student). The value of these programs would be greater than just fertility control, of course, but in the absence of good studies, it seems unlikely that greater than a 10% reduction of under-18 pregnancies (or deliveries) would occur from the addition of such a program. The under-18 fertility benefits from such a family life and sex education program, under these assumptions, would be a yearly reduction of about 25,000 deliveries per year to women under 18 years. That implies a cost of about \$96,000 to prevent one pregnancy, if all the family life and sex education effects were assigned to fertility.

If the approximately 225,000 adolescents carrying their first pregnancy to term were receiving intensive family life and sex education services as a part of comprehensive programs, and if 20% of the \$1500 per year put into these students' education were put into this subject (or \$300 per year per pregnant student), the cost would be \$67.5 million per year. Evaluative studies have suggested that perhaps a 25% reduction of rapid subsequent pregnancies (under age 18) would occur.¹¹ This would mean preventing about 6500 of the 26,000 or more second and third deliveries before age 18. An investment of money 1% as large would prevent about one fourth as many births, under these assumptions. Of course, it is to be expected that there would be other important benefits from family life and sex education in both settings, which are not considered here.

One fact not always known is that the prematurity and perinatal mortality rates for second and third birth order deliveries to adolescents are much greater than the same risks for first births to adolescents, even though the adolescents are, on the average, younger at the time of the first births.¹² It may be that the adolescent woman does not tolerate the repeated stresses of pregnancy as well as the would later. This provides a solid, medically based reason for strong programs to help adolescents prevent subsequent pregnancies while still of school age.

DISCUSSION

The argument of this article has been to remind everyone that in complex social-medical phenomena, the simplicity and high benefit-to-cost ratio of, for example, immunization programs, do not exist for primary prevention. It is dangerous, therefore, to assume, without supporting data, that primary prevention is necessarily the best, or even a good, programmatic approach to adolescent pregnancy at this time. Theoretical, practical, and benefit-to-cost problems exist, which make the concept of "primary prevention"

¹¹ The point here is not to consider whether such a cost, if accurate, would produce sufficient benefits to make it worthwhile; rather the purpose is to develop a model for comparing the advantages of two different approaches.

difficult to apply in a simplistic manner to adolescent pregnancy.

This does not mean that better ways to assist adolescents in preventing first pregnancies should not be explored. The most basic steps, however, would appear to be the most important at this time, and these steps are more "enabling" than "promotive" in nature: every family and every adolescent should have easy access to contraceptive and abortion education and services, should they choose to make use of them. At this time, active, organized promotion of these services would appear to be more efficient in the context of programs for those adolescents who have already had a pregnancy.

CONCLUSIONS

1. There are theoretical, practical, and financial problems with organized programs for the "primary prevention" of pregnancies to adolescents. Organized primary prevention programs will probably not cause a major drop in adolescent fertility rates in the absence of considerable economic, social, and attitudinal changes in the society.

2. Despite the many problems, abortions represent a major form of primary prevention of births to adolescents.

3. At this time, limited resources are probably better spent on providing easy access to contraceptive and abortion education and services, and on intensive programs for those who already have had pregnancies, rather than on a large organized program in primary prevention.

REFERENCES

1. Mottet J. The health and demographic consequences of adolescent pregnancy and childbearing. Presented at the Conference on Research on the Consequences of Adolescent Pregnancy and Childbearing, Bethesda, Md, Oct 29-30, 1973.
2. Leavell H, Clark E. *Preventive Medicine*, ed 3. New York: McGraw-Hill, 1965.
3. McKinlay J. The sick role—Ilness and pregnancy. *Soc Sci Med* 6:541-572, 1972.
4. MacGregor F. *Social Science in Nursing*. New York: Russell Sage Foundation, 1960.
5. Hens W. Is pregnancy really normal? *Fam Plann Perspect* 3:5-10, 1971.
6. Lewis DO, Klerman LV, Jellif JF, et al. Experiences with psychiatric services in a program for pregnant school-age girls. *Soc Psychol Q* 16-25, 1973.
7. Johnson LW, Klerman LV, Currie JB, et al. Suicide attempts in a population program as teenagers. *Am J Public Health* 60:2280-2301, 1970.
8. Klerman LV. Adolescent pregnancy: The need for new policies and new programs. *J Sch Health* 45:263-267, 1975.
9. Heng WB et al. Adolescent fertility—Risks and consequences. *Population Reports, Series J*, No 10:157-175, July 1976.
10. House EA, Goldsmith S. Planned parenthood services for the young teenager. *Fam Plann Perspect* 4:27-31, 1972.

11. Gordis L, Fassett JD, Finkelstein R, et al: Adolescent pregnancy: A hospital-based program for primary prevention. *Am J Public Health* 58:849-858, 1968.
12. Gordis L, Finkelstein R, Fassett JD, et al: Evaluation of a program for preventing adolescent pregnancy. *N Engl J Med* 282:1078-1081, 1970.
13. Klerman LV, Jekel JF: *School Age Mothers: Problems, Programs, and Policy*. Hamden, Conn, Linnet Books, 1973.
14. Jekel JF, Tyler NC, Klerman LV: Induced abortion and sterilization among women who became mothers as adolescents. *Am J Public Health* 67:621-625, 1977.
15. Jekel JF, Klerman LV, Bancroft DRE: Factors associated with rapid subsequent pregnancies among school age mothers. *Am J Public Health* 63:769-773, 1973.
16. Fineberg B: *Evaluation of the New Teen Clinic of PPGNH*. thesis. Yale School of Public Health, New Haven, Conn, 1973.
17. Paul EW, Pilpel HF, Wechsler NF: Pregnancy, teenagers, and the law. 1976. *Fam Plann Perspect* 8:16-21, 1976.
18. US Dept of HEW, Center for Disease Control: *Abortion Surveillance, Annual Summary, 1973*. Atlanta, CDC, 1975.
19. Jekel JF, Harrison JT, Bancroft DRE, et al: A comparison of the health of index and subsequent babies born to school age mothers. *Am J Public Health* 65:370-374, 1975.
20. *Comparison of Neonatal Mortality From Two Cohort Studies*. Series 20, No 13. National Center for Health Statistics, HEW Publication HSM 72-1056, June 1972.

James Franklin Jekel, MD, MPH, is Associate Professor of Public Health, Department of Epidemiology and Public Health, Yale Medical School, 60 College Street, New Haven, Connecticut 06510.

Induced Abortion and Sterilization Among Women Who Became Mothers as Adolescents

JAMES F. JEKEL, MD, MPH, NATALIE C. TYLER, RN, BA,
AND LORRAINE V. KLERMAN, DRPH

Abstract. Four cohorts of urban women who delivered a child before reaching age 18 were followed for periods ranging from 6 to 12 years to determine use of abortion and sterilization. The two more recent cohorts had been served by comprehensive service programs. About 40 per cent of each of the groups used abortion or sterilization to control fertility. Most of the women

seeking abortion had no subsequent term or near term deliveries, suggesting that such a request may signal a desire to terminate childbearing, at least for a few years. A high proportion of the young mothers obtained abortions during the second trimester, even for repeat abortions (Am J Public Health 67:621-625, 1977).

To what extent do women who become mothers while of school age subsequently use surgical means to control fertility? This paper seeks to answer this question for two cohorts of young women who participated in a comprehensive service program¹ for school-age mothers in New Haven, Connecticut, and to compare their experience with that of two groups of similar women who delivered prior to the development of special services. This is a follow-up study of a large-scale evaluation of programs for school-age mothers published previously.²

Related Studies

Little is known about the use of surgical means of fertility control by young mothers served by comprehensive service programs. Some pregnant teenagers seek abortions, but those who enter comprehensive service programs apparently expect to carry the current pregnancy to delivery. The literature

describing such programs often emphasizes their provision of contraceptive education and devices to prevent subsequent unwanted pregnancies, abortion counseling is seldom, if ever, mentioned. Moreover, much of the literature on programs for school-age parents describes services provided in the 1960s, before abortions were widely available.

In the 1970s, a limited number of follow-up studies have suggested that the subsequent fertility of mothers served by comprehensive programs, although reduced below that expected without such programs, is still high.³⁻⁵ Although abortions have become more accessible to many school-age mothers, in 1974 there were 247,000 births to women under age 18 in the United States.⁶ Recent data show that unmarried women have a much higher legal abortion ratio^{7,8} than do married women, nonwhite women have a higher legal abortion ratio than white women, and women under age 15 have the highest abortion ratio of any age group, with the 15-19 year age group also being high.⁹ Pregnant adolescents, who are usually unmarried when they conceive, thus combine two and often three of these characteristics, and, therefore, would be expected to be at high risk for abortion. Those who participate in comprehensive programs, however, have decided not to terminate their pregnancies and they are often given intensive education in contraceptive use after delivery. They might be expected, therefore, to seek abortions less often than would be anticipated on the basis of age, ethnic group, and marital status. Few data have been reported for this population, however. Furstenberg¹ studied long term fertility among school-

Address reprint requests to Dr. J. F. Jekel, Associate Professor of Public Health, Department of Epidemiology and Public Health, Yale University School of Medicine, 60 College Street, New Haven, CT 06510. Ms. Tyler is Research Assistant, Yale University School of Medicine. Dr. Klerman is Associate Professor of Public Health, Florence Heller Graduate School for Advanced Studies in Social Welfare, Brandeis University. This paper, submitted to the Journal October 26, 1976, was revised and accepted for publication March 2, 1977. An earlier version was presented at the 1975 Annual Meeting of the American Public Health Association in Chicago.

*A comprehensive service program usually offers prenatal care, counseling, and special educational opportunities. It may also provide day care, family life education, and other services.

⁷The legal abortion ratio is the number of legal abortions per 1,000 live births for the defined group.

age mothers in Baltimore, most of whom were non-white, and found that whereas only 1 per cent terminated their first pregnancy by abortion, 4 per cent aborted a second pregnancy, and 19 per cent and 18 per cent aborted third and fourth pregnancies, respectively. His sample included both those served by a special clinic for school-age mothers and those served only by a regular obstetrical clinic, but the data were not analyzed to determine if there was a difference between these groups.

Populations Studied

All the women studied delivered at the Yale-New Haven Hospital (YNHH) for the index pregnancy, i.e., the one that brought them into the study. Two groups were served by the Young Mothers Program (YMP), a comprehensive service program and two control groups received traditional services. The first study group consisted of 180 women served by the YMP in 1967-1969, who were studied prospectively (the "Prospective" group). The second group were served by the YMP in 1965-1967, prior to the addition of the program's educational component. This group of 111 was originally studied retrospectively (the "Retrospective" group). The third group (Control group II) consisted of 83 young women who delivered during 1963-1965, before the development of the YMP; they were otherwise similar to the two groups already mentioned. The fourth group (Control group III) included 54 young mothers who also delivered in 1963-65, but who did not meet all of the research criteria for the major study because of marriage, residence outside of New Haven, pregnancy terminated in a spontaneous or therapeutic abortion, or lack of prenatal care.

The study groups were similar in many ways: mostly poor, mostly non-white, and with a median age of 16 years.

Methods

In 1973 the inpatient, outpatient, and emergency room records of the YNHH were reviewed for evidence of deliveries or other terminations of pregnancy, and for other medical and social information on all members of the four groups. The dates and methods of all terminations of pregnancy were recorded and also the date of the last visit of any kind. Some women were lost to follow-up, but a surprisingly high percentage could be followed for most of the study period (Table 1). The earlier (control) groups had a smaller percentage seen

at YNHH within the last two years, but fully as high a proportion of Control group I had been followed at any point in time after the index pregnancy as was the case in the Retrospective or Prospective groups. Some of the differences seen in Control group II, however, might be due to less adequate follow-up.

Because YNHH chart numbers were available from the previous study, there was no loss to follow-up due to name changes. It is possible that some young mothers went to New York or elsewhere to obtain abortions, especially before 1973 when they became freely available in New Haven, but they could not have obtained abortions at the only other hospital in the New Haven S.M.S.A. within obstetrical unit, the Hospital of St. Raphael. The data on surgical terminations reported here, therefore, might underestimate their use.

Use of Induced Abortion

A significant minority of all four groups used induced abortion during the follow-up period (Table 2). All but four abortions in this analysis were medically induced and legal, four mothers used self-induced abortions, there were no known illegal abortions. Because of their small number, the self-induced abortions are not separated out for separate analysis. Thirty-four per cent of the most recent group of school-age mothers had one or more abortions. The percentage is lower in the earlier groups, which may reflect the fact that abortion was not freely available in New Haven until 1973.

Except for the Control group II, none of the young mothers aborted the index pregnancy (to have done so would have made them ineligible for the study). None were known to have given up their babies for formal adoption. The findings reported, therefore, apply to women who chose to keep an early child.

For the two most recent study groups, almost one-half of those using abortions for the first time did so to prevent or delay delivery of a second child (Table 3). Another one-third sought abortions after they had had two children, and less than one third underwent first abortions for higher orders of parity. Those who did not seek surgical intervention until higher parities tended to use sterilization instead.

An increasing proportion of pregnancies were terminated by abortion as gravidity increased (Table 4). In this table, in order to simplify analysis and description, all known pregnancies for each young mother were counted, regardless of method of termination. The increase in the proportion aborted with increasing pregnancy number is consistent with

TABLE 1—Length of Time since Delivery and Recency of Follow-up by Group

Group	Number	Year Delivered	Potential Follow-up (%)	Per Cent seen at YNHH in last 2 yrs.
Prospective	180	1967-1969	6-9	84
Retrospective	111	1965-1967	8-10	83
Control I	83	1963-1965	10-12	71
Control II	54	1963-1965	10-12	56

ABORTION AND STERILIZATION IN ADOLESCENTS

TABLE 3—Number and Percentage of Young Mothers Undergoing One or More Abortions, All Groups.

	Group									
	Prospective		Retrospective		Control I		Control II		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Total number	180	(100)	111	(100)	83	(100)	54	(100)	428	(100)
No. with one or more abortions	62	(34)	28	(25)	15	(18)	10	(19)	115	(27)
Of these mothers, no. with one or more known self-induced abortions	1	(1)	1	(1)	2	(2)	0	-	4	(1)

the findings of Furstenberg¹ mentioned above and may reflect an increasing concern on the part of young mothers to limit further fertility.

The significance of an abortion can be seen even more clearly by looking at the number of live infants delivered subsequent to the first use of an induced abortion (Table 5). In three of the four groups, almost 30 per cent of those undergoing induced abortions had no subsequent term or near-term deliveries during the follow-up period, even though, one young mother had as many as 3 consecutive abortions over a four-year period. Only 22 per cent of the 61 young mothers in the Prospective group using induced abortion had any term deliveries subsequent to the first induced abortion, and most of these had only one subsequent delivery. In most of the young mothers, the decision to seek an abortion appeared to signal a desire to prevent having further children, at least for several years; the average period of known follow-up after the first abortion was 2.2 years for the Prospective group, 3.2 years for the Retrospective group, and 3.6 years for the Control group.

A high proportion of the young mothers seeking abortion obtained them after the first trimester of pregnancy (48 per cent of first abortions and 37 per cent of subsequent abortions). These proportions for late abortions are far higher than the U.S. average for 1972 (16.5 per cent) and the New York City experience during a similar time (17.7 per cent).⁴ Although some differences may be due to the time required for psychiatric approval (needed before the Con-

necticut law was liberalized), some of the differences may reflect lack of education about abortion or ambivalence in the young mother toward obtaining an abortion.^{5,6}

Use of Sterilizations

The data on sterilizations for all groups give further support to the suggestion that many young mothers wanted to terminate childbearing. Surgical sterilization had been obtained by 21 women (12 per cent) of the Prospective group by an average of seven years after the index pregnancy; by 19 women (17 per cent) of the Retrospective group by an average of nine years postpartum; by 22 women (27 per cent) of the Control group I and by 14 women (26 per cent) of Control group II by an average of 11 years postpartum. The number of known sterilizations per year per 100 women varied between 1.7 and 2.5 in the four groups.

Not all of the sterilizations were done for the purpose of preventing subsequent pregnancy. Twenty-seven per cent of the sterilizations in the four groups were hysterectomies, done for a variety of reasons, including carcinomas-in-situ of the cervix, an ovarian tumor, and problems resulting from chronic pelvic inflammatory disease. However, the reasons for hysterectomies as opposed to tubal ligation were not always apparent from the hospital charts.

One woman who had undergone a bilateral tubal ligation at age 20 following two deliveries, two miscarriages, and one

TABLE 5—Parity at Time of First Induced Abortion, All Groups.

Parity at First Abortion	Group									
	Prospective		Retrospective		Control I		Control II		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
0										
1	30	(48)	12	(43)	1	(7)	1	(10)	44	(38)
2	20	(32)	10	(36)	3	(20)			33	(29)
3	8	(13)	6	(18)	7	(47)	2	(20)	23	(20)
4	5	(8)			4	(27)	6	(60)	13	(11)
5			1	(4)					1	(1)
Total	62	(100)	28	(100)	15	(100)	10	(100)	115	(100)

TABLE 4—Number and Proportion of Pregnancies Terminated by Abortion, Prospective and Control I Groups.*

Prospective Group			
Pregnancy Number	N	No. Terminated by Induced Abortion	Percent Terminated by Induced Abortion
1	100	0**	0
2	140	20	14
3	68	21	31
4	48	14	29
5	28	11	39
6+	7	5	71

Control I Group			
Pregnancy Number	N	No. Terminated by Induced Abortion	Percent Terminated by Induced Abortion
1	63	0**	0
2	74	1	1
3	80	3	4
4	28	7	25
5	24	7	29
6+	15	6	40

*This table cannot be compared directly with Table 3 because of known pregnancies are included here (64 pregnancies) whereas only post-20 week gestation terminations are included in Table 3 Study.

**No abortions proved for these prospective because criteria for admission to research group excluded those with abortion, and most were pregnant for the first time.

induced abortion, subsequently decided she wanted more children and had surgery to reanastomose the tubes. It is not yet clear whether or not the surgery was successful. Another was considering another surgery. The modal parity for the groups at the time of sterilization was three, with the range from one to nine. The age at sterilization among the four groups varied from 14 years (a hysterectomy done for extreme retardation and uncontrollable behavior during menses) to 28 years. The median age at sterilization in the four groups was 21, 23, 25, and 25 years. The interval from termination of first pregnancy to the time of sterilization ranged from 0 to 14 years, with the average in the four groups being 4.2, 6.4, 7.4, and 8.7 years respectively.

Relatively few women used abortions before resorting to a probably irreversible solution (Table 6). Rather, the two control groups tended to use sterilization, and those served by comprehensive programs tended to use abortion. This may be

partly explained by the higher parity of the older groups. The greater number of sterilizations among the control groups may also reflect a greater desperation among a group for whom induced abortions were not easily available. The desperation of some is well shown by the experience of one woman who, following two deliveries, aborted herself four times, then had a medically induced abortion, and finally obtained a sterilization at age 21.

An attempt was made to find variables that would predict use of abortion or sterilization. A large amount of data on personal, educational, and medical variables were collected in the original study of the Prospective group. These data were obtained in a prospective manner and therefore the only statistical biases to be expected in examining associations with later use of surgical termination of pregnancy would be due to differential loss to follow-up. Since most of the young mothers were located for interviews two years postpartum, this is not thought to be a serious problem.

Contrary to expectation, none of the many variables tested with a good predictive of whether or not the young mother would subsequently seek a surgical termination. The only statistically significant patterns which emerged were that those young women who stayed in school through graduation and/or remained single tended to use abortions more than sterilization, and those who dropped out of school and married were more likely to use sterilization. Marital status at delivery of the index child and 26 months later did not predict use of abortion. The data on marital status thereafter were not considered reliable enough to analyze. Acceptance of contraceptive postpartum and their reported use at 26 months postpartum were not associated with either use of abortion or sterilization.

Discussion

This study shows that subsequent fertility looms as a serious problem to many school-age mothers, regardless of whether they participated in comprehensive service programs. Despite the fact that the data reported here are minimum estimates (since some were lost to follow-up), approximately 40 per cent of all four groups used either abortion or sterilization or occasionally both, to control subsequent fertility.

This heavy reliance on surgical means of fertility control was not anticipated and was somewhat disappointing in view

TABLE 5—Number of Term or Near Term Deliveries following the First Induced Abortion, All Groups

Number of Deliveries after first induced abortion	GROUP							
	Prospective		Retrospective		Control I		Control II	
	No.	%	No.	%	No.	%	No.	%
0	50	(81)	15	(54)	11	(73)	8	(80)
1	8	(13)	12	(43)	2	(13)	1	(10)
2	4	(6)	1	(4)	2	(13)	2	(20)
Total with abortion	62	(100)	28	(100)	15	(100)	10	(100)

ABORTION AND STERILIZATION IN ADOLESCENTS

TABLE 1—Joint Distribution of Use of Sterilization and Abortion Among All Groups.

	GROUP									
	Prospective		Retrospective		Control I		Control II		Total	
	N = 180		N = 111		N = 83		N = 54		N = 438	
No. mothers using ster	No.	%	No.	%	No.	%	No.	%	No.	%
and/or abortion	78	(43)	42	(38)	31	(37)	21	(39)	172	(40)
Mothers using	57	(32)	23	(21)	9	(11)	7	(13)	96	(22)
abortion only										
Mothers using	16	(8)	14	(13)	16	(18)	11	(20)	57	(13)
sterilization										
only										
Mothers using	5	(3)	5	(5)	6	(7)	3	(6)	19	(4)
abortion and										
sterilization										

of the Young Mothers' Program's attempt to encourage use of contraception through counseling and education. Two possible explanations must be considered: 1) that these young mothers experienced contraceptive failure, and that surgical means of fertility control were sought to deal with this failure, or 2) that surgical procedures were used in preference to contraception as a means of controlling fertility. This study, neither acceptance of contraceptives in the immediate postpartum period nor the reported use of contraception 15 or 26 months postpartum were associated with surgical methods of fertility control. Perhaps the decision to seek surgical intervention is a highly individual response to immediate felt needs and not due to a stylized response set.

These findings raise a number of serious questions. Why are the existing methods of contraception not adequate to meet the fertility control needs of almost one-half of this population? How can they be made more satisfactory? Should discussions of the alternatives of abortion and sterilization become a regular part of the family planning educational programs for young mothers? To do so would risk alienating religious and ethnic groups, and might also be interpreted as an endorsement or encouragement of these methods. Yet, it may be equally wrong to let a high risk population face decisions about surgical means of termination without previous discussion of the issues involved, such as the importance of seeking help early should an abortion be contemplated. Unfortunately, this study has no answers to the questions raised in this paragraph.

REFERENCES

1. Klerman, L. V. and Jekel, J. F. School Age Mothers: Problems, Programs, and Policy. Harlan (Agnet Books, 1973).
2. Curran, J. B., Jekel, J. F., and Klerman, L. V. Subsequent pregnancies among teenage mothers enrolled in a special program. *Am. J. Public Health* 62: 1606-1611, 1972.
3. Jorgensen, V. One year contraceptive follow-up of adolescent patients. *Am. J. Obstet. & Gynecol.* 115: 483-486, 1971.
4. Dickens, M. O., Madd, E. N., Garcia, G. R., et al. One hundred pregnant adolescents: treatment approaches in a university hospital. *Am. J. Public Health* 63: 794-806, 1973.
5. DHEW, National Center for Health Statistics, Vital Statistics of the United States, 1974, Vol. I, Monthly. Washington, D.C.: U.S. Govt. Printing Office, 1976 (in press); as quoted in *Eleven Million Teenagers*. New York: The Alan Guttmacher Institute, Planned Parenthood Federation of America, 1976.
6. U.S. Dept. H.E.W., Center for Disease Control, Abortion Surveillance 1974. Atlanta: Center for Disease Control, 1976.
7. Furstenberg, F. E. Unplanned Parenthood: the social consequences of teenage childbearing. Final report of a research grant submitted to the Maternal and Child Health Service, 1975.
8. Bracken, M. D., and Kass, S. Y. Delay in seeking induced abortion: a review and theoretical analysis. *Am. J. Obstet. Gynecol.* 121: 1008-1019, 1975.
9. Bracken, M. D., and Kass, S. Y. First and repeat abortions: a study of decision making and delay. *J. Biomed. Sci.* 7: 473-491, 1975.

ACKNOWLEDGMENT

This study was supported by grant #MC R-090337 from the Maternal and Child Health Service, U.S. Public Health Service, DHEW.

Reprinted from the American Journal of Public Health
Vol. 66, Number 4, April 1976
Printed in U.S.A.

A Comparison of the Health of Index and Subsequent Babies Born to School-Age Mothers

JAMES F. JEKEL, MD, MPH
JEAN T. HARRISON, MPH
D. R. E. BANCROFT, MPhil
NATALIE C. TYLER, RN, BA
LORRAINE V. KLERNAN, DPH

This study of school age mothers reveals that the risk of prematurity and perinatal death increases greatly in their second and third pregnancies

Introduction

Approximately 350 special programs have been developed in America over the last 10 years which provide medical, educational, and social services to school age parents. The medical component of these programs varies considerably, some programs merely refer clients elsewhere for medical care and some provide obstetric and/or pediatric care along with educational and social services. This paper reports some of the findings from a 5-year prospective evaluative study of a comprehensive program for school age mothers which integrated obstetric care with other services. The health at birth of the index infant (the product of the pregnancy which brought the mothers into the special program and, hence the research sample) is

compared with the health of subsequent infants born to the same mothers.

An earlier report from this project concluded that the infants born to mothers served by the comprehensive program were significantly more healthy at birth than were infants born to a control group who received traditional obstetric clinic care.¹ The questions being considered in the present paper are (1) did the apparent health benefit for the index infant also hold for infants born subsequently?, and (2) if not, why not?

The Special Program

The Young Mothers Program (YMP) in New Haven, Connecticut, provided educational and special services through the Polly T. McCabe Center as well as obstetric and social services through the Yale-New Haven Hospital, where a special clinic was established to serve school age mothers exclusively. Continuity of care was emphasized from the 7th month on, and the obstetrician or nurse-midwife who provided prenatal care was usually the one who delivered the baby (or at least was present at the delivery) and followed the mother through her postpartum period. The social workers held two or three intake interviews with each young mother and then saw her as needed. Group sessions were offered at which a wide range of topics was discussed

Dr. Jekel, Ms. Harrison, Mr. Bancroft, and Ms. Tyler are affiliated with the Department of Epidemiology and Public Health, Yale University School of Medicine, New Haven, Connecticut 06510. Dr. Klerman is with the Florence Heller Graduate School for Advanced Studies in Social Welfare, Brandeis University, Waltham, Massachusetts. This study was supported by Grant MC-R-090048 from the Maternal and Child Health Service, Health Services and Mental Health Administration, Department of Health, Education, and Welfare. This article was presented at the 100th Annual Meeting of the American Public Health Association, November 13, 1972, Atlantic City, New Jersey.

370 APRIL 1976, Vol. 66, No. 4

relevant to pregnancy, delivery, contraception, child care, and relationships with men. Many of the young mothers were no longer eligible for the YMP clinic during their subsequent pregnancies because of age and some who were eligible were not referred to the special clinic or did not choose to return to it. Therefore, for most subsequent deliveries, prenatal care was obtained in the regular obstetric clinics.

The Study Method

The health at birth and in the immediate postpartum period of 180 index infants was compared with that of the first 193 subsequent infants born to a cohort of 180 young mothers who registered for prenatal care for their index pregnancy in the Young Mothers Clinic of the Yale New Haven Hospital between September 1, 1967, and June 30, 1969. All of the young mothers were under 18 years, unmarried, and residents of New Haven at the time they registered for care in the special obstetric clinic. Most of them (95 per cent) were nonwhite, and most were poor: 10 had delivered one infant previously and two more had delivered twice prior to intake into the program. The primary data sources were hospital, clinic, and emergency room records from the Yale New Haven Hospital. These data were supplemented by records from the Hospital of St. Raphael, the only other hospital in the New Haven area, and from clinicians' rating forms, school records, and postpartum interviews. All of the index babies and all but two of the 103 subsequent babies were delivered at the Yale New Haven Hospital. Therefore, the primary sources of data were comparable for almost all of the deliveries.

Findings

Method of Termination

By the end of the follow up period, January 31, 1972, 79 of the 180 mothers in the study population were found to have delivered one or more subsequent infants of 20 weeks gestation or more at the Yale New Haven Hospital, and they had delivered a total of 103 babies. In addition, 21 spontaneous abortions were recorded among 16 mothers, 22 medically induced abortions were found among 21 mothers, and one young mother had a self-induced abortion. The large number of induced abortions suggests that teenagers will choose to terminate a subsequent pregnancy when the alternative of abortion is legal and available.

Comparison of Health at Birth among Index and Subsequent Babies

The most striking finding was the significantly higher risk of perinatal mortality and prematurity among the 103 subsequent infants than among the 180 index infants.

SURVIVAL

Nine of the 103 subsequent infants died in the perinatal period compared to two of the 180 index infants. Among the nine subsequent perinatal deaths there were eight hebdomadal deaths and one stillbirth, two of these infants had the same mother. The subsequent infants, therefore, had a rate of death almost 9 times that of the index infants. A difference this large would occur by chance in less than one case in 1000. Clearly, subsequent babies born to 2 to 4 years (mostly less than 2 years) following an initial school age pregnancy had a significantly higher risk of perinatal death than did their older siblings.

PREMATURITY

Twenty-eight of the subsequent infants (27 per cent) were of low birth weight, under 2500 gm (Table 1), which is over twice the proportion of prematures in the index group, and is even higher than the 23 per cent prematurity rate reported by Waters in 1969 for subsequent deliveries to young mothers.¹ Low birth weight is associated with, and is presumably a causative factor in, most deaths around the time of birth. The range of the birth weight in the nine infants who died was between 580 and 2220 gm. Only two weighed over 2000 gm. Thirty-two per cent of the infants of low birth weight died, none died who weighed 2500 gm or more.

Factors Associated with High Risk

Two factors are apparent. The study population delivered less healthy babies in subsequent deliveries than in the initial ones despite the fact that the mothers were older. Second, prematurity was the most important immediate cause of perinatal death. The following will be considered.

TABLE 1.—Obstetric Outcomes among Index and Subsequent Infants

Outcome	Index (N = 180)		Subsequent (N = 103)	
	No.	%	No.	%
Survival				
Perinatal death	2	1.1	9	8.8
Living infants	178	98.9	94	91.2
Total	180	100.0	103	100.0
$\chi^2 = 8.26, p < 0.01$				
Birth weight				
Less than 1000 gm.	2	1.1	3	2.9
1000-2499 gm.	19	10.6	25	24.3
2500+ gm.	159	88.3	75	72.8
Total	180	100.0	103	100.0
$\chi^2 = 11.04, p < 0.01$				

TABLE 2—Obstetric Outcomes among Index and Subsequent Babies Born at Yale-New Haven Hospital, by Birth Order

Outcome	Birth Order							
	1		2		3		Total	
	No.	%	No.	%	No.	%	No.	%
Survival								
Perinatal death	1	0.8	6	2.1	4	14.3	11	3.8
Living infants	187	99.4	79	92.8	24	89.7	270	96.1
Total	188	100.0	85	100.0	28	100.0	281*	100.0
Birth weight								
Less than 1000 gm	1	0.8	2	2.4	2	7.1	5	1.8
1000–2499 gm	12	10.1	16	18.8	10	35.7	43	15.3
2500+ gm	150	89.3	67	78.8	16	57.1	233	82.9
Total	168	100.0	85	100.0	28	100.0	281*	100.0

* Two subsequent infants born at the Hospital of St. Raphael Inc. excluded from this analysis.

as possible reasons for the high rate of prematurity, parity, delivery-to-conception interval, prenatal care, and differences between mothers.

Parity

The number of previous deliveries was associated significantly with survival. Considering index and subsequent deliveries at the Yale-New Haven Hospital only, first births had a risk of perinatal death of less than 1 per cent, second births 7 per cent, and third births 14 per cent. The corresponding prematurity rates among these infants were 11 per cent, 21 per cent, and 43 per cent (Table 2).

For women in their twenties, second deliveries involve less risk of prematurity and perinatal loss than first deliveries, which is in contrast to the pattern observed among these teenagers. The increased risk in subsequent pregnancies among these young mothers appears to have resulted from the interaction between age and parity, i.e., high parity in a young mother produced high risk. The mechanisms for this interaction may be physiological factors, such as nutritional deficits and/or hormonal immaturity, or social and environmental factors, such as poverty and inadequate health care.

Delivery-to-Conception Interval

In order for a woman to have several pregnancies in her teens, conceptions must occur at short intervals. Possibly one of the factors leading to prematurity and perinatal death was the length of the interval between the previous delivery and the subsequent conception. The young mother might not have had enough time to prepare physiologically and nutritionally for a new pregnancy.

* All but two of the subsequent deliveries were to women who were under 20 years of age when they delivered.

TABLE 3—Obstetric Outcomes by Interval from Previous Delivery to Subsequent Conception

Outcome	No. of Months from Previous Delivery to Subsequent Conception			
	No.	Mean	Median	Range
Perinatal death	9	12.2	14.0	3–29
Premature live birth	20	12.2	10.5	4–36
Full term live birth	23	12.3	10.0	1–47
Total	102*	12.4	10.0	1–47

* One set of twins considered one delivery.

Mean Squared χ^2 df $F = 0.022$

Among groups: 1.507 2
Within groups: 87.295 89 $p > 0.5$

The number of months between the previous delivery and the subsequent conception was calculated for the subsequent deliveries. If a delivery was less than term, the approximate gestation interval was estimated from the birth weight. Contrary to expectation, a one-way analysis of variance showed no statistically significant difference between the average conception intervals for the various outcome categories (Table 3).

Prenatal Care

In both index and subsequent pregnancies, a strong relationship was demonstrated between the number of prenatal visits and the outcome of the delivery; i.e., women who made fewer prenatal visits were more likely to deliver prematurely, or to have their infants die in the perinatal period. This finding can be partly explained by the fact of prematurity, which reduces the number of prenatal visits a woman can make.

The mothers who had subsequent deliveries sought less

care for the subsequent than for the index pregnancy. All kept at least one clinic appointment during the index pregnancy, and the average number of appointments kept was 2.7. For the subsequent deliveries, seven (6.8 per cent) received no prenatal care, and the average number of appointments kept was 5.1. Of the nine perinatal deaths, two of the mothers had no visits, five had only one, one had three, and the visits of four were unknown. Some of the deaths might have been prevented had the mothers sought early and regular care, but this association cannot be shown to be causal.

Differences between Mothers

Were the mothers who delivered again different from those who did not in ways that may have influenced obstetric outcomes? Four categories will be analyzed: preexisting characteristics, participation in the special program, obstetric outcomes for the index pregnancy, and subsequent life status.

PREEXISTING CHARACTERISTICS

The two groups did not differ significantly on any of the following preexisting characteristics: age, race, religion, socioeconomic quartile, length of residence in New Haven, number in the household, ordinal position, birthplace, educational goals, appropriateness of grade level, number of parents in the household, welfare status, or number of previous pregnancies.

PROGRAM PARTICIPATION

Women who delivered again participated less in the special program. For example, the mothers who later had subsequent infants attended the special educational program a lower percentage of the days for which they were eligible and participated less actively in the group sessions.

The mothers who delivered again also made fewer prenatal visits during the index pregnancy, although this did not appear to influence obstetric outcomes adversely for that pregnancy. Their average number of clinic visits during the index pregnancy was 7.7, compared to 9.1 visits for those who did not have subsequent deliveries ($t = 2.760$, df

$= 178$, $p < 0.01$). This difference was partly explained by the fact that those mothers who later had subsequent children came for care about 1 1/2 weeks later in gestation during the index pregnancy and kept a lower percentage of clinic appointments. These differences in participation during the index pregnancy may reflect subtle differences in social, psychological, and/or environmental factors which affected the outcomes of subsequent pregnancies either directly or through reduced prenatal care.

INDEX OUTCOMES

No significant difference could be found between the 79 mothers who delivered again and the 101 who did not in the obstetric results of the index pregnancy (Table 4). Nor did the two groups differ on any other index of maternal and child health during the index pregnancy. As a group, those mothers who delivered again evidently were biologically as able to produce healthy children as those who did not. The results of the subsequent deliveries, therefore, do not reflect a selection process whereby the mothers at highest risk were those who delivered again.

SUBSEQUENT LIFE STATUS

The mothers having subsequent babies differed from those who did not on a number of indicators of life status at 15 and 26 months postpartum. For example, they were less likely to be in school and to be working. However, it is difficult to interpret these data as indicating a difference between the index and subsequent mothers, because the very fact of having another pregnancy may be the explanation for less schooling and employment.

Discussion

During the past decade, special interest has been focused on the very young mother, and many programs have been established to reduce her obstetric risks. Less attention has been focused on those mothers having subsequent pregnancies, perhaps because it has been assumed that the added year or two between pregnancies reduced obstetric risk, or perhaps because program staff are not aware of the problems of these same girls as they

TABLE 4.—Obstetric Outcomes of Index Pregnancy, by Subsequent Delivery

Obstetric Outcome of Index Pregnancy	Subsequent Delivery					
	Yes			No		
	No	%		No	%	Total
Stillbirth	0	—		0	—	0
Hebdometrical death	0	—		2	2.0	2
Preterm live birth	9	11.3		10	9.9	19
Full term live birth	70	88.6		89	88.1	159
Total	79	100.0		101	100.0	180

become older, since they are less likely to use special services. However, this study indicates that subsequent infants are at greater obstetric risk than those infants delivered previously, when the mother received special services for her initial pregnancy. More attention should be given to subsequent pregnancies among teenage girls, both from a service and a research viewpoint.

The reasons why some of these mothers had little or no prenatal care for subsequent pregnancies are not apparent. The fact that these mothers also sought less care for the index pregnancy than those mothers without subsequent pregnancies suggests that they had less understanding of the importance of obstetric care, or that something in the home situation interfered with clinic attendance.

The YMF, which assisted the young mothers to achieve good obstetric outcomes during the index pregnancy, did not appear to have helped those with subsequent pregnancies to have equally good obstetric outcomes.

The crucial questions are why, despite the special program's extensive educational effort during the index pregnancy, many did not use contraception, and why many of those who were pregnant again did not receive adequate care.

Perhaps the young mothers felt guilty about returning for care since the program personnel had expected that they could be successful contraceptors. Those encouraging the use of contraceptive methods may not have felt able at the same time to help the young mother to plan for the failure of family planning. Is it really possible to say with conviction, "You can postpone the next baby if you want to" and at the same time say, "If you do have another baby come back to see us early"? It was apparent that some of the girls felt keenly the expectation of the clinicians who gave them the contraception, because more than one stated at interviews 1 to 2 years later that they would not feel

right about going back to the Young Mothers Clinic with another baby.

Conclusions

During the past decade, more interest has been focused on providing care for young mothers during their first pregnancies than during subsequent ones. This study suggests that the infants at greatest risk are those delivered subsequently to girls still in their teens. Clearly, the high risk of prematurity and perinatal death provides justification for delay of subsequent infants in teenage mothers.

If subsequent pregnancies cannot be prevented, greater efforts should be made to provide care to young mothers experiencing second or third pregnancies.

A special comprehensive crisis intervention program for school-age mothers, while apparently having a positive effect on obstetric outcomes for index infants born to participants, had no long lasting impact (i.e., no beneficial effect on the outcomes of subsequent pregnancies).

References

1. Jekel, J. F., Currie, J. B., Klerman, L. V., McCarthy, C. P. N., Sarrel, P. M., and Greenberg, R. A. An Analysis of Statistical Methods for Comparing Obstetric Outcomes. *Am J Obstet Gynecol* 112:9-19, 1972.
2. Waters, J. Jr. Pregnancy in Young Adolescents. *South Med J* 62:655-658, 1969.
3. Burch, H. G., and Gussow, J. D. *Disadvantaged Children: Health, Nutrition, and School Failure*. Harcourt, Brace, and World, Inc., New York, 1970.
4. National Academy of Sciences. *Maternal Nutrition and the Course of Pregnancy*. Washington, DC, 1970.

This report deals with the behavior of school-age girls who receive family planning services. Such services cannot be provided in a vacuum and the study tries to define the factors influencing the relationship of the girls to the services and their reproductive behavior.

Factors Associated with Rapid Subsequent Pregnancies Among School-Age Mothers

James F. Jekel, M.D., M.P.H.; Lorraine V. Klerman, Dr.P.H.; and Debra R. E. Bancroft, M. Phil.

Introduction

Can family planning services be offered to school-age mothers in the same way as to other, older patients, or must new approaches be tried to overcome the special problems of this group? Preliminary findings from a larger study of multiservice programs for teenage pregnant girls suggest that contraceptive programs must be specifically tailored for this youthful group.

This report analyzes the reproductive performance of the participants in two such programs and relates this performance to: 1) the characteristics of the programs, 2) certain pre-existing characteristics of the participants, 3) the degree of their participation in one of the programs, and 4) other findings at 15 months postpartum.

Description of Programs

The two programs studied are compared in Table 1. Since they have both been described fully in an article in another journal, only those aspects relevant to family planning will be reviewed. The New Haven Young Mothers Program provided a special obstetrical clinic for teenage mothers where continuity of care was emphasized. After the 28th week, the obstetrician or nurse-midwife responsible for each case saw the patient each antepartum visit, in most cases was present at the delivery, and examined the new mother at her first postpartum visit, when contraceptive methods were considered. The obstetrician and nurse-midwives also participated in many of the group sessions conducted by social workers at the McCabe Center* during which topics of interest to the mothers-to-be, including family planning, were discussed. By contrast, Hartford's Interagency Service program did not provide any medical services, but did require its clients to receive obstetrical care, either at one of the

three local hospital clinics, or through a private obstetrician. Family planning received vigorous attention in both the medical and social service aspects of the YMP program. In Hartford, however, the hospital clinics and private physicians varied in their emphasis on family planning. Family planning education was provided within the school setting by a nurse assigned by the local visiting nurse association. According to the hospital records in Hartford, contraceptives were prescribed for 69% and 73% of those returning for 6 week postpartum checkups to the two non-Catholic hospitals in Hartford, and for only 3% in the Roman Catholic Hospital, which served about half of the program participants.

Method

One hundred and eighty girls were entered into the research project through the Young Mothers Clinic at the Yale-New Haven Hospital in New Haven, Connecticut (YMP group), and 160 through the special school operated by the Interagency Services Program in Hartford (IAS).

Two methodological problems caused modification of the original plans for data analysis. First, the high mobility of the populations caused delay in finding some of the mothers scheduled for the second of three waves of interviews, and, consequently, median times for the second interview (whose results are reported here) were 14 months in Hartford and 16 months in New Haven. New Haven's completion rate, however, was 91%, or 164 completed interviews; Hartford's was 127, or 80%. For convenience these data are reported as 15 month postpartum findings.

Second, despite the fact that both study groups met the same research criteria (each participant had to be in the

*A multiservice center for pregnant girls of school age maintained with the cooperation of several New Haven agencies. Its principal component is a school operated by the Board of Education.

Interviews originally were scheduled at 2, 13, and 24 months postpartum.

Table 1—Comparison of Services Provided by the Young Mothers Program (YMP) and Inter Agency Services Program (IAS)

	New Haven Young Mothers Program (YMP)	Hartford Inter Agency Service Program (IAS)
Medical Services	Special clinic for teenage mothers. Continuity of care emphasized. Some cases cared for by nurse-midwives	Referred to one of 3 hospitals or to private physician
Educational Services	Serves grades 7-12. Obstetricians & nurse-midwives participate in educational sessions led by social workers at McCabe Center	Serves grades 9-12
Social Services	Only social workers with master's degrees employed	Social workers with bachelor's degrees supervised by person with master's degree
	Hospital based but much work done at Center	School based
	Mixed casework-groupwork approach	Emphasis on informality and "non-prying" approach
School Nursing Services	Provided by VNA	Provided by VNA

program and, at registration be under 18 years of age, unwed, and resident of New Haven or Hartford) and were demographically similar, differences between the two groups arose due to variations in the intake policies of the two programs. For example, since the Young Mothers Clinic accepted pregnant school girls of all ages, as did the school at the McCabe Center, there were some junior high school students in the New Haven sample. Intake into the Hartford study sample, however, was through the IAS school, which served only grades 9-12, and therefore this group did not include any junior high students. Moreover, some of the girls served by the Young Mothers Clinic did not attend the special school, whereas all IAS girls attended the special school since it was the source of intake. To eliminate the possible effect of these differences in the populations, a modified sample of YMP girls was created which met all of the intake criteria for the IAS school, namely, they attended the special school and were 9th grade or above. In addition, the few whites in each sample were removed to provide greater demographic homogeneity with only a small loss to sample size.

The results, and importance, of this modification are shown clearly by Table 2. Table 2a shows the 15 month status of the two study populations before they were made equivalent and suggests that the IAS mothers were more successful than those in the YMP in delaying subsequent pregnancies, staying in school, finding jobs, and becoming independent of welfare assistance. When the groups are compared after modification (Table 2b), the differences previously noted either have disappeared or been sharply diminished. This demonstrates the danger of drawing conclu-

sions about the relative effectiveness of different programs on the basis of end result statistics, unless the groups served are closely similar.

Reproductive History at 15 Months Postpartum

Comparison of Two Programs

The similarity in rates of subsequent pregnancy and other short term outcome variables in the modified samples at 15 months postpartum suggests that the two different multiservice programs (YMP, IAS) provided similar opportunities for their clients (Table 2). At this point, neither program is clearly superior to the other. Perhaps the truth is that a variety of multiservice programs staffed by dedicated people can provide the needed opportunities, and that given quality programs, the differences in "outcomes" observed among programs are due more to differences in populations served than to program details.

Association with Pre-existing Characteristics (YMP only)

There were no statistical associations between the following demographic, economic, and educational characteristics of the girls at registration and whether or not they had a rapid subsequent pregnancy: age, number of years of residence in New Haven, number of parents in the household, total number of persons in the household, ordinal position,

*The following account are based on a total of 164 young mothers interviewed at 15 months postpartum.

Table 3—Comparison of 15 Month Status, YMP and IAS Groups, Before and After Modification to Make Groups Equivalent on the Basis of Intake Criteria

	A. Before modification		B. After modification	
	YMP N=164 No. %	IAS N=127 No. %	YMP N=166 No. %	IAS N=121 No. %
Subsequent pregnancy				
No	125 (76)	104 (82)	97 (58)	99 (82)
Yes	39 (24)	23 (18)	19 (12)	22 (18)
Education				
In school or graduated	92 (56)	96 (76)	73 (44)	93 (77)
Dropped out	72 (44)	31 (24)	33 (20)	28 (23)
Employed at time of interview				
Yes	50 (30)	51 (40)	40 (24)	49 (40)
No	114 (70)	76 (60)	86 (52)	72 (60)
On welfare				
No	49 (30)	43 (34)	34 (21)	40 (33)
Yes	115 (70)	84 (66)	72 (43)	81 (67)

number of previous pregnancies, socioeconomic quartile, welfare status, educational goals, or whether or not they were in the appropriate grade. The lack of associations may be related to the homogeneity of the study group on many of these variables, which was partly due to the nature of the program (based in a hospital clinic) and partly to the research design (all who participated had to meet the study criteria). Among the pre-existing characteristics, only school status at registration was correlated significantly with subsequent pregnancy ($p < .01$); those in school were less likely to become pregnant again by 15 months postpartum.

Association with Program Participation (YMP only)

The study also measured the girls' participation in the three major components of the YMP: obstetric, educational, and social service. The variables that measured participation in the obstetric clinic, such as the week of gestation they registered for care and the number and percentage of antepartum clinic visits kept, were not associated with avoiding a rapid subsequent pregnancy. However, the following variables were associated with delay of pregnancy beyond 15 months: attending McCabe ($p < .05$), attending McCabe regularly ($p < .01$), and attending a high number and percentage of the group sessions conducted by the social workers ($p < .05$).

Those who had delayed another pregnancy beyond 15 months postpartum tended to have participated actively both in the school program and in the social work component. The strongest association was with the percentage attendance at the school for those registered for credit (Table 3). Thirty percent of the 73 poor attenders (those who attended less than 60% of the time) were pregnant again by 15 months; whereas none of the 24 with good attendance (80% or better) were pregnant by that time.

Association with Other Outcome Variables (YMP only)

As can be seen from Table 4, the outcomes of interest to those serving teenage mothers are not independent of each other. School status at 15 months showed the strongest association with remaining non-pregnant (Table 5). Those in school or graduated were less likely to be pregnant. Those who were not married also were less at risk for an additional pregnancy.

The difference in reproductive performance by educational status is readily understandable when the use of birth control by 15 months postpartum is compared with school status at that time (Table 6). Information both on the prescription of birth control at an early postpartum clinic visit and on its use at the time of the 15 month postpartum interview is available for 147 girls from the YMP study group. At the postpartum visit, some form of birth control was prescribed

Table 3—Relationship Between Attendance at Special School and Additional Pregnancy Status by 15 Months Postpartum (Only for YMP Participants With 15 Month Postpartum Interview)

Percent of eligible days in attendance at special school	Subsequent pregnancies by 15 months postpartum		
	None	One or more	Total
	No. %	No. %	No. %
Less than 60%	51 (70)	22 (30)	73 (100)
60-79%	34 (89)	4 (11)	38 (100)
80-100%	24 (100)	—	24 (100)

$\chi^2 (1) = 27.7, p < .001$

$p < .001$

Table 4—Associations Among Outcome Variables at 15 Months Postpartum, YMP Participants With 15 Month Postpartum Interview, N=164*

Status at 15 months postpartum	Status at 15 months postpartum			
	In school or graduated	No subsequent pregnancy	Not married	Employed
No subsequent pregnancy	01	—	—	—
Not married	01	01	—	—
Employed at interview	05	05	N S	—
Independent of welfare	N S	05	~ 01	01

* Numbers are the probability of the association being due to chance. The variables were dichotomized and the column headings and sub-headers are used to indicate the direction of the association.

Table 5—Subsequent Pregnancy Before 15 Months Postpartum by School Status and Marital Status (Only for YMP Participants With 15 Month Postpartum Interviews)

Marital status and school status at 15 months postpartum	No subsequent pregnancy		Subsequent pregnancy		Total	
	No.	%	No.	%	No.	%
In school or graduated						
Married	7	(78)	2	(22)	9	(100)
Unmarried	77	(80)	6	(7)	83	(100)
Total	84	(81)	8	(9)	92	(100)
Dropped out						
Married	13	(50)	13	(50)	26	(100)
Unmarried	28	(62)	17	(38)	45	(100)
Total	41	(58)	30	(42)	71	(100)

Source: Data from

Total school status reported pregnancy status, corrected $\chi^2 (1) = 2.03$ at $p < .05$

Total marital status reported pregnancy status, corrected $\chi^2 (1) = 1.78$ at $p < .05$

For 132 (90%) of these young mothers. By the time of the interviews, however, of the 57 girls who had dropped out of school, only 18 (32%) were still using a method of birth control, and 23 (44%) were pregnant again. The remaining 14 were neither using birth control nor pregnant. In contrast, of the 75 who had been prescribed contraceptives and who were still in school or had graduated, 57 (76%) were still using birth control, and only 6 (8%) had become pregnant again. These highly significant differences strongly suggest the possibility that the mere perception of birth control need sufficient to prevent subsequent pregnancies. The motivation and/or ability needed to remain in school also may be a crucial factor in the continued use of oral contraceptives.

Moving since delivery also was associated with a higher risk of rapid subsequent pregnancy. Only 11% of the non-movers reported a subsequent pregnancy at 15 months,

compared to 37% of those who moved. The subsequent pregnancy rates are higher both for those who moved because they married and for those who, though unmarried, left their families.

Discussion

Rapid subsequent pregnancies among school-age mothers appear to be associated strongly with school status and with program participation. Since almost as strong an association was found between school status at two months and 15-month pregnancy status as between school status at 15 months and pregnancy, the association between pregnancy and school attendance was not due to the new pregnancy or baby keeping the mother at home. A later pregnancy could not have caused the school status more than a year earlier.

Table 8—Use of Contraceptive at 15 Months Postpartum by School Status (Only for Y&M Participants for Whom Contraceptives Were Prescribed at a Postpartum Visit)

School status at 15 months postpartum	Use of contraceptive at 15 months postpartum				Total
	Using contraceptive	Not using contraceptive but not pregnant	Pregnant		
	No. %	No. %	No. %	No. %	
In school or graduated	57 (76)	12 (16)	6 (8)	75 (100)	
Dropped out	18 (32)	14 (25)	25 (44)	57 (101)	
Total	75 (57)	26 (20)	31 (23)	132 (100)	

21 H1 Qyde 18 8 801

Moreover, the girls who experienced another pregnancy were eligible to return to the McCabe Center if they desired. These findings suggest that either the motivation to achieve an education or the information and values received in school, or both, influence the girls toward avoiding an early additional pregnancy.

It is clear that the mere provision of contraceptives, even in a special clinic, cannot be equated with success in teenage girls. Effective use of an oral contraceptive requires continuous, active participation on the part of the user, which appears to be related to the motivation required of those who continue in school. The Lippe's loop had limited application in the Young Mothers Clinic since it proved unsatisfactory to most of its school-age users. More recently the obstetricians in the Clinic have used other intrauterine devices which appear to have a higher degree of acceptance among the current program participants.

Another possible explanation for the association between school continuation and avoiding a rapid subsequent pregnancy is the level of sexual activity. Schofield found that in England, those girls who were in school had significantly less sexual activity than those who had dropped out. It is not clear that his findings can be easily applied to the urban situation in this country, but that may be another explanation for the association reported here.

Finally, although marriage may be viewed as the causal factor in the case of having another baby and/or dropping out, it also is possible that this association is not strictly causal, rather it may be that the major alternatives in lifestyle for girls who become pregnant while still of school age are: 1) staying single and going to school, or 2) marrying and dropping out. Similarly, the new mother who chooses to leave her parents, in the absence of a husband, also may be pursuing a lifestyle which will lead to subsequent pregnancies, probably out-of-wedlock.

The findings in this paper are similar to those in several other studies, most recently that of Siegel et al.³ Their figures show a continuation rate for the pill at one year of only 48% for women who completed no more than the eighth grade. They found that surprisingly few factors assumed to be related to contraceptive use were actually predictive, other than demographic and educational variables. The demographic factors cited in Siegel's study were not relevant here because of the demographic homogeneity of the study group. Education, the other factor found important by Siegel's group, also emerged in this study as the most important pre-

dictor of contraceptive use and of avoidance of subsequent pregnancy.

Conclusions

Family planning services cannot be provided in a vacuum, especially to school-age girls. The prescribing physician must consider the motivation and life goals of each of his patients. These data suggest that the highly motivated, school-oriented girl will use oral contraceptives and will not become pregnant quickly; although an IUCD may be used if it is preferred by young mothers from this group. However, the young mother who is oriented toward marriage and/or is not interested in school probably will not continue to take the pill. In these cases the prescribing physician should consider inserting an IUCD if it is acceptable to her. Family planning for school-age girls must be part of a broadly based program of services that can assist these young mothers to define, and then achieve, both short and long term life goals, and effective prescribing must be based on a knowledge of such goals.

ACKNOWLEDGMENTS

We wish to thank Mrs. Brigitte A. Prutloff for her assistance in the preparation of this paper.

References

1. Jekel, James F., et al. An analysis of statistical methods for comparing obstetric outcomes: Infant health in three samples of school-age pregnancies. *Am J Obstet Gynecol* 111: 17-19, 1972.
 2. Schofield, Michael. *The Sexual Behavior of Young People*. Boston: Little Brown and Co., 1965.
 3. Siegel, Earl, et al. Continuation of Contraception by Low Income Women: A one year follow-up. *ASPM* 61, 9 (1966-1971), 1971.
- Dr. Jekel is Associate Professor of Public Health, Yale University, New Haven, Connecticut. Dr. Klerman is Associate Professor of Public Health, Florence Heller Graduate School for Advanced Studies in Social Welfare, Brandeis University, Waltham, Massachusetts. Mr. Bancroft is Systems Programmer, Yale University, New Haven, Connecticut. This study was made possible by grant MC-R-40064 from the Maternal and Child Health Service, HSA/HHA, Dept. H E W. It is a revised version of material presented before the Maternal and Child Health Section of the American Public Health Association at the 99th Annual Meeting, Minneapolis, Minnesota, October 13, 1971.

Pregnant teenagers who continue their schooling are compared with those who drop out. All the girls studied had access to a special educational program for young mothers. Factors affecting school attendance two months postpartum are analyzed. The authors critically discuss assumptions on which programs for teenage mothers are based and evaluated.

Pregnancy and Special Education: Who Stays in School?

Introduction

Pregnancy is a major reason for dropping out of school.¹⁻⁷ Most school systems do not permit pregnant students to continue attending regular classes.⁸⁻⁹ A recent study reported that scarcely one in three school districts made educational provisions for pregnant girls.¹⁰ Girls who drop out during pregnancy face serious problems when and if they return to school.¹¹ For girls obliged to drop out frequently the only alternative schooling during pregnancy is homebound instruction. For example, in New Haven during 1966-1967, it was found that 27 per cent of the total applicants for homebound instruction were pregnant girls.² However, as Osofsky¹² has noted, in spite of homebound programs, the girl leaving school because of pregnancy often becomes a drop-out.¹³

Programs have sprung up throughout the country to meet the educational, social, and medical needs of these girls.^{1,12-18} Most of these provide separate educational facilities for school-age pregnant girls and offer special social and health services. Program evaluations have also appeared. The Webster School in Washington, D.C., which was among the earliest of these programs, found that girls who attended the special school were more likely to return to regular school postpartum than girls who had not attended any school during pregnancy.¹⁹ A similar, less extensive study by the CEG program in Detroit came to much the same conclusions.²⁰ Of the girls who went through the YMED program in Syracuse, N.Y., and re-entered regular school, 90 per cent were thought to continue to remain in the school system.²¹ Other administrators²²⁻²⁴ have voiced the expectation that participants in their programs will be more likely to continue their education than non-participants.

More recently, a few programs, like the Atlanta-Georgia Adolescents Pregnancy Program,²⁵ have tried to meet a girl's health, educational and social needs while she stays in regular school. These programs are currently being evaluated, but as yet no results have been published.

Purpose

This paper reports on the experience of girls in the New Haven Young Mothers' Clinic in staying in school during pregnancy and in returning to school postpartum. This study, part of a long-range evaluation of two programs

Anne-Marie Foltz, M.P.H.; Lorraine V. Klerman, Dr.P.H.; and James F. Jekel, M.D., M.P.H.

for pregnant teenagers, will focus on the girls' characteristics and their school status two months postpartum. Specifically, it will answer the following questions:

1. How many of the girls were behind in school and how did this affect their school careers?

2. In what ways did the girls who attended a special educational program during pregnancy differ from those who did not?

3. In what ways did the girls who regularly attended the special program differ from those with poor attendance records?

4. Were age, school status during pregnancy, school attendance record, or educational goals related to continuation in school after delivery?

Finally, the authors will examine some of the assumptions made in evaluating programs for young mothers. Many different goals, some conflicting, have been posited for such programs by administrators and members of the community, and as the paper will show, no overall evaluation of the programs' successes or failures can be made without prior clarification of society's goals and expectations.

Study Sample

The sample for this study consisted of all unmarried girls, under eighteen residing in New Haven who registered for prenatal care at the Yale-New Haven Hospital from September 1, 1967 to June 30, 1969, and were assigned to the Young Mothers Clinic,² a comprehensive hospital based service. This sample of 180 included only those girls whose pregnancy terminated at the hospital after twenty weeks gestation. One hundred sixty-nine girls (94 per cent) were experiencing their first pregnancy. The median age at registration was 16 years, 5 months, with a range of 12 years, 11 months to 17 years, 11 months.

At the time the girls registered at the clinic, 150 (83 per cent) were still going to school and the remainder had dropped out. Of the 121 students who were in high school, about one-third came from each of New Haven's three public high schools. Twenty-one girls were in local interme-

diary schools and three were in elementary school. Five girls who had recently moved from schools outside Connecticut but had not yet registered at New Haven schools were not considered dropouts.

Whether or not they were in school at the time they sought prenatal care, all girls were encouraged by the social workers to participate in the educational and other programs offered at the Polly T. McCabe Center if they had not already registered there. The McCabe Center brings together many community services including health counseling and social work and makes them available to all pregnant New Haven teenagers, regardless of where they seek prenatal care. McCabe's major component is a special educational program supported by the Board of Education. The class schedule and textbooks used are designed to parallel those in the student's regular school so that she will not lose time because of her pregnancy. Students are urged to return to the McCabe Center for an interim period after delivery and then to re-enter their regular school. If the girl is under sixteen, the compulsory school age, she either has to attend McCabe, be placed on homebound instruction, or stay in her regular school. If the girl is sixteen or over, she is urged to attend McCabe even if she has dropped out of school previously. McCabe's open door policy means that no girl who wants an education is turned away regardless of her previous educational record or the severity of her social problems. This policy differentiates McCabe's educational program from those in other communities where only girls considered likely to complete high school are admitted or where the law requiring school attendance under a specified age is not enforced for pregnant girls.

McCabe personnel hope that each girl will continue in school until high school graduation, but, recognizing that some girls are no longer school oriented, sometimes counsel them into high school equivalency courses and, after delivery, into employment or alternate programs such as a skill center or manpower training programs. In many cases the McCabe Center continues to counsel a girl whether or not she enrolls in the educational program.

Study Method

Information about the girls was obtained from medical records, social workers' notes, school records, and home interviews a few months after delivery. Four dependent variables were tested against a large number of independent variables. The dependent variables were: whether the girl was in the grade appropriate for her age; whether she enrolled in the educational program at the McCabe Center; her attendance record at McCabe; and her school status two months after her baby's birth. The independent variables included several demographic and socioeconomic factors: birth order, parity, medical complications, psychiatric referral, educational goals, and school status at the time of clinic registration and at delivery. In addition, the first three dependent variables were used as independent variables when analyzing school status postpartum. This paper will report only those findings which are statistically significant at the 5 per cent level.

Were the Girls in the Grade Appropriate for Their Age?

We hypothesized that pregnant teenagers might be

having academic as well as social problems. Previous studies differed in their findings. The Webster School¹⁴ which had a selective admissions policy, reported that less than one per cent of its girls were behind in grade for their age level while at YMED 90 per cent of the students were not operating at grade level or above.¹⁵ Parker¹⁶ noted that one-third of her study sample had an IQ of less than 75, but only one and one-half per cent of girls in a Los Angeles program were found to be below average in intellectual ability.¹⁷

These variations may be attributed partially to differences in the samples chosen for study and partially to the method of calculating whether or not a student is behind in school or below standard for her age. At least three methods can be used: intelligence tests, teachers' evaluations, and comparison of age to grade. The third method was chosen for this study since group evaluations of mental ability are not given routinely in the New Haven schools and teachers' evaluations would have been difficult to obtain for girls who had dropped out prior to the study. The two methods used in this study to calculate the appropriate age for a grade are discussed in the Appendix.

The study sample appeared representative of the non-white urban population from which most of its members came. The 1960 Census¹⁸ reported that 17 per cent of urban non-white girls aged 14 and 15 were below mode (in a grade below that appropriate for their age). Using the same method of calculation for the 14 and 15 year olds in the study group, 15 per cent were found below mode. For girls aged 16 and 17, the Census proportion of girls below mode rose to 20 per cent, and for the study it rose to 23 per cent. These pregnant girls then appeared no more likely to be behind in school than their non-pregnant contemporaries if the findings in the 1960 census still held true for 1967-69.

To ascertain how girls in the appropriate grade differed from those below grade, an exact age to grade comparison was used since it appeared to be a more sensitive indicator of appropriateness of grade than the census method. This method established a maximum age for every grade by month. Then, each student's exact age by month was compared to that standard. Students who exceeded the maximum age were considered to be below the grade appropriate for their age. By the exact age to grade comparison, 38 per cent of the study girls were below the grade appropriate for their age.

Girls who were in the appropriate grade for their age differed significantly from those who were not by birth order and size of household only. Seventeen per cent of oldest and only children were below grade compared to 43 per cent of those in other birth order positions ($\chi^2 = 3.70$, $p < .01$). Girls from small households were less likely to be below grade (30 per cent) than those from large families (47 per cent, $\chi^2 = 4.42$, $p < .05$). This finding is not surprising. Psychologists have suggested that birth order can affect a child's achievement and performance. Firstborns are apt to show greater dependence on adult norms and to have more expectations of them.¹⁹ They are hardworking, susceptible to social pressure, and more likely to meet teachers' expectations.^{20, 21} They seem to do better in high school than other children.²² Consequently, they would be less likely to fall below the grade appropriate for their age.

The high proportion of girls below the grade appropriate

prior to their age, although representative of an urban non white population, indicates that many of the girls in the study group were facing academic problems prior to their pregnancy. This could only compound the task of agencies assisting with the social and emotional problems associated with pregnancy.

Who Enrolled in the Educational Program at the McCabe Center?

Of the 180 girls in the study, 153 enrolled in the educational program at McCabe. Four of these girls later transferred to homebound instruction. Among the remaining girls, 23 did not attend any school and five continued in their regular school. How if at all did the girls who enrolled at McCabe differ from those who did not?

The major distinguishing characteristic was that girls who were in school at the time they registered for prenatal care were more likely to enroll in McCabe (96 per cent) than girls who had dropped out of school previously (23 per cent) (Table 1). Only one of the girls attending regular school at the time of clinic registration did not continue her education either at McCabe or her regular school or on homebound instruction during pregnancy. Although McCabe personnel tried to attract and keep in school those thirty girls who had dropped out prior to clinic registration, only seven enrolled in McCabe. Thus, the existence of the special program did not deter most of those determined to drop out of the school system.

Age directly affected school status at registration and thereby enrollment at McCabe. Some of the girls over the compulsory age had dropped out of school prior to clinic registration. Among girls under sixteen at the time of delivery, 93 per cent attended McCabe, but among those seventeen and older only 73 per cent attended. Regardless of age, however, those in school at registration were more likely to enroll in McCabe (Table 1). The 168 girls experiencing a first pregnancy were more likely to enroll in McCabe (87 per cent) than the twelve who had been pregnant before (42 per cent) ($\chi^2 = 13.78$, $p < .001$). This was related, however, to their school status at the time of clinic registration. 86 per cent of the girls experiencing their first pregnancy, but only 50 per cent of the girls expecting a second or subsequent baby were in school at the time of clinic registration.

During an interview with a social worker, the girls were asked about their educational goals. For analysis these goals were grouped as follows: 1) drop out of school or undecided, 2) complete technical or high school, 3) go to college or other post high school educational institution. Only half of those in the dropout or undecided group enrolled in McCabe. However, 85 per cent of those who planned to complete technical or high school and 90 per cent of the college-oriented students enrolled. Moreover, college-oriented girls were likely to take advantage of McCabe regardless of whether they were in school at registration. Of the four girls who were not in school at registration and whose stated goal was college, three enrolled in McCabe (Table 2).

In summary, girls under sixteen who were expecting their first baby were most likely to be in school when they

registered at the clinic. Being in school at registration predisposed girls toward enrolling in McCabe. However, girls whose stated educational goal was college were likely to enroll in McCabe regardless of their school status at the time of registration (Figure 1).

Which Students Attended McCabe Regularly?

M McCabe Center personnel tried to help its students attend school regularly. Whenever a girl was absent, a member of the school staff would telephone her to inquire into the reason for the absence and offer medical or social services if needed. However, perfect attendance was not possible since most girls were absent about two weeks after their baby's birth. In this study we calculated attendance figures from the day of enrollment in McCabe Center till

Table 1—Enrollment at McCabe by Age at Delivery and School Status at Clinic Registration

		Enrolled in McCabe %	Not in McCabe %
Under 16 years old			
Still in school	(N=57)	96.2	3.8
Previously dropped out	(N=5)	40.0	60.0
16 to 18 years			
Still in school	(N=42)	95.2	4.8
Previously dropped out	(N=5)	20.0	80.0
17 years and over			
Still in school	(N=51)	94.1	5.9
Previously dropped out	(N=20)	20.0	80.0
	$\chi^2 = 36.57$ $p < .001$		
Total			
Still in school	(N=100)	96.0	4.0
Previously dropped out	(N=30)	23.3	76.7
	$\chi^2 = 92.37$ $p < .001$		

Table 2—Enrollment in McCabe by School Status at Clinic Registration and Educational Goals

		Enrolled in McCabe %	Not in McCabe %
In School at registration			
Drop out of other goals	(N=11)	90.9	9.1
Technical or high school	(N=78)	96.2	3.8
Go to college	(N=53)	96.2	3.8
Previously dropped out			
Drop out of other goals	(N=13)	9.1	90.9
Technical or high school	(N=14)	21.4	78.6
Go to college	(N=4)	75.0	25.0*
Total			
Drop out of other goals	(N=23)	50.0	50.0
Technical or high school	(N=93)	94.9	5.1
Go to college	(N=57)	94.7	5.3
	$\chi^2 = 23.53$ $p < .001$ $df = 2$		

* Girls who were undecided registered regularly in terms of employment goals, but not in terms of their intention to go to high school or college.

Figure 1—Factors Affecting Likelihood of Enrolling in McCabe Center Educational Program

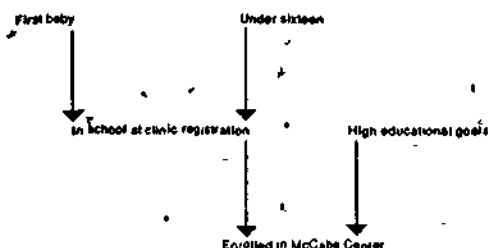


Table 3—Regularity of Attendance at McCabe by (a) Educational Goals, (b) Appropriateness of grade and (c) Age

		Attended less than 50% %	50-69% attendance %	Attended 70% or more %
A. Educational goals				
Drop out or other	(N=10)	50.0	50.0	—
Technical or high school	(N=79)	40.5	32.9	26.6
Go to college	(N=54)	25.0	35.2	39.8
B. Appropriateness of grade				
In appropriate grade	(N=91)	25.3	38.5	36.3
Below appropriate grade	(N=59) $\chi^2 = 11.05 \text{ } p < .01$	50.8	30.5	18.6
C. Age				
Under 15	(N=23)	60.9	21.7	17.4
15 or more	(N=127) $\chi^2 = 7.75 \text{ } p < .05$	30.7	37.8	31.5
Total	(N=150)	35.3	35.3	29.3

the day the girl returned to her regular school postpartum. Of the 150* girls enrolled in McCabe, 29 per cent attended 70 per cent or more of the days they were enrolled. Thirty-five per cent of the girls attended less than half the time.

The only comparable attendance figures available are from the Webster School¹⁴ which calculated a girl's attendance record prior to delivery only. At Webster, 52 per cent of the students attended 75 per cent or more of the time and only 9 per cent attended less than half the time. These differences probably are caused not only by the method of calculating attendance, but also by New Haven's policy of accepting all girls who wanted to enroll. In contrast, the Webster School took only those girls who were expected to benefit from the opportunity. In fact, poor attenders at the Webster School frequently were reminded that many girls were waiting for these places and they could be dropped if they failed to maintain regular attendance.

At the McCabe Center students with high educational goals (as defined earlier) attended school more regularly than those with low goals. Among college-

oriented students, 39 per cent had good attendance (attended 70 per cent or more of the time) and 26 per cent had poor attendance (less than 50 per cent attendance). Among those who planned to drop out or were undecided, none had good attendance and half had poor attendance. Students who planned to complete technical or high school fell between these two extremes (Table 3A).

Another factor in regularity of attendance at McCabe was whether a girl was in the grade appropriate for her age. Fifty-one per cent of the girls below the appropriate grade were poor attenders in contrast to 25 per cent of those in the appropriate grade (Table 3B).

Although younger girls were more likely to be going to school at the time of clinic registration and therefore more likely to enroll in McCabe, they were less likely to attend McCabe regularly. Sixty-one per cent of the students under fifteen years of age were poor attenders and only 17 per cent were good attenders. The other age groups were almost equally divided into good, moderate, and poor attenders (Table 3C). Howard¹⁵ has suggested that very young pregnant girls may have particularly severe social and emotional problems. These problems, which may have led to the pregnancy, could prevent young girls from at-

* One girl who attended McCabe on a non-credit basis is not included in this analysis.

sending school regularly. In addition, parents may be more protective of younger girls and encourage them to stay home for the slightest cause.

Girls under the age of fifteen, those with low educational goals, and those who were below the appropriate grade were likely to attend McCabe infrequently. In planning programs for school-age pregnant girls methods should be sought for meeting the needs of these poor at-tenders.

Who Returned to School Two Months Postpartum?

The teenager with a baby who attempts to return to school finds she has many new problems. Yet, of the 179 girls for whom information was available 125 (70 per cent) were in school two months after their baby's birth. Not all had returned to regular academic schools. Thirteen were still at the McCabe Center, six girls were on homebound instruction, and thirteen were attending a work study program at a community skills center. Two girls were working toward high school equivalency diplomas at night school.

One girl had graduated before delivery and eleven others after, making a total of 117 or 77 per cent of the sample in school or graduated two months postpartum. In subsequent analysis girls staying in school and graduated are combined into one group.

Students who continued in school after clinic registration fared better educationally in the postpartum period than those who dropped out. Eighty-six per cent of the 151 girls enrolled in McCabe and 80 per cent of the five who continued regular school were in school or had graduated two months postpartum compared to 13 per cent of the 23 who had not attended after clinic registration. Thus, of the 156 girls who had attended either McCabe or regular school during pregnancy 86 per cent were in school or graduated two months postpartum compared to 13 per cent of the 23 who did not attend any school during pregnancy ($\chi^2 = 55.25, p < .001$).

Those in school at clinic registration were likely to be in school or graduated two months postpartum regardless of whether the girls enrolled in McCabe (87 per cent of 144) or stayed in regular school (4 out of 5). In contrast, among girls who had dropped out prior to clinic registration, McCabe enrollees were more likely to be in school or graduated postpartum (71 per cent of seven) than those who had no schooling after registration (13 per cent of 21). It should be remembered that all but one of the girls who were in school at registration either enrolled in McCabe or stayed in their regular school.

Older girls were less likely to be in school or graduated two months postpartum than younger girls, but this was related to their school status at clinic registration. A greater proportion of girls sixteen and over had dropped out of school prior to clinic registration. Again, school status at registration, not age, appeared to be the determining variable (Table 4).

A girl's motivation to stay in school as reflected by her educational goals and school attendance affected her

Table 4—School Status Two Months Postpartum by Age and School Status at YMA Clinic Registration

		In school at 2 months	Dropped out at 2 months
In School at Registration			
Under 16 yrs	(N = 57)	89.5	10.5
16-18 yrs	(N = 41)	82.9	17.1
17 yrs and older	(N = 51)	86.3	13.7
Dropped Out at Registration			
Under 16 yrs	(N = 51)	80.0	20.0
16-18 yrs	(N = 5)	20.0	80.0
17 yrs and older	(N = 20)	20.0	80.0
Total			
Under 16 yrs	(N = 108)	87.1	12.9
16-18 yrs	(N = 46)	78.1	21.9
17 yrs and older	(N = 71)	87.6	12.4

school status two months after her baby's birth. Ninety-five per cent of the girls with college as a goal were in school or had graduated two months postpartum as opposed to 24 per cent of the girls who were planning to drop out or were undecided. For students who enrolled in McCabe 100 per cent of those with good attendance were in school or had graduated two months postpartum compared to 77 per cent of those who attended less than half the time. Since being in the grade appropriate for one's age was associated with high attendance it is not surprising that for McCabe enrollees, being in the appropriate grade also was associated with being in school or graduated two months postpartum. Apparently, the highly motivated were able to continue school during the immediate postpartum period despite the difficulties of infant care (Table 5). Ultimately, the larger study of which this is a part, will report on the girls' educational status two years postpartum. At that time the relative importance of motivational factors will be clearer.

Assumptions Affecting This Study

Any evaluation of a program involving human lives and complex social situations is limited by the assumptions of those people operating the program. Those underlying it and particularly those evaluating it. Three assumptions which may have affected this evaluation of a young mothers' program must be discussed before further conclusions are drawn.

The first assumption is that schooling is good, that continuing in and graduating from high school are valid goals against which to measure the effectiveness of a special program. This widely held assumption has been questioned. Particularly by community groups on the grounds that many girls are not interested in high school graduation and should not be obliged to follow an academic course that lacks relevance for them.

In terms of future earnings, studies have shown that average annual income increases substantially with additional years of education¹⁶ and it is in the student's financial self-interest not to drop out of secondary school.¹⁷ Moreover, as Rogers has pointed out, education pays off for all people about equally well, regardless of intelligence.

* One girl moved out of town after her baby's birth and could not be located. Two girls in postpartum 179 babies were living with their mothers. Two had died shortly after delivery and four were living with relatives. Since the educational status of the six girls without babies (they were in school and two had dropped out) did not differ markedly from the sample as a whole, this group was included in the total sample.

Table 5—School Status Two Months Postpartum by (a) Educational Goals, (b) Per cent of Time Attended the McCabe School, and (c) Appropriateness of Grade for Age for McCabe Enrollees

		In school or graduated at two months %	Not in school at two months %
A. Educational goals			
Drop out or other	(N = 21)	23.8	76.2
Technical or high school	(N = 83)	77.4	22.6
Go to college	(N = 57)	94.7	5.3
Total	(N = 171)	76.6	23.4
$\chi^2 = 43.16$		$p < .001$	
B. Regularity of attendance			
Attended less than 50%	(N = 53)	77.4	22.6
50-69%	(N = 53)	84.9	15.1
70% and over	(N = 44)	100.0	—
Total	(N = 150)	86.7	13.3
$\chi^2 = 10.68$		$p < .01$	
C. Appropriateness of grade (McCabe enrollees)			
In appropriate grade	(N = 81)	92.5	7.5
Below appropriate grade	(N = 59)	78.0	22.0
$\chi^2 = 5.19$		$p < .05$	

(at least within wide limits). Thus the more education achieved by these young mothers most of whom are unmarried the better able they should be to support their families.

Critics who take issue with the use of future earnings as an argument for high school graduation maintain that many unmarried mothers do not intend to and should not be obliged to enter the job market. One may, however, question the fairness of relegating these young women to the status of economically dependent citizens and perhaps even inadequately educated consumers. However, unfortunate society's preference for the educated may seem to be this preference cannot be denied simply by saying it ought to be changed. As long as society continues to discriminate against the uneducated, high school graduation is a reasonable measure by which to evaluate the success of special programs for teenage mothers.

In this study we considered any girl who remained in any program that might lead to a high school degree a short-term success for the program. This included the five girls who were in high school, equivalency or work study programs. Thus the 137 girls 77 per cent of the total, who were in school or graduated two months postpartum, can all be considered short-term successes for the program.

The second assumption is that special programs for young mothers are to produce major changes in the educational career of the girls involved. In order to test this assumption this study would have had to determine whether the girls who were in school postpartum were there because of the McCabe educational program or because of their own personal characteristics. Due to the absence of a true control group²² no easy answer to this question is available. Moreover, the kind of control necessary for a research design adequate to answer this question may be very difficult to obtain in our society. For example one might take random or matched samples of girls and assign them either to special programs or to regular schools during pregnancy or take one group of girls and purposely offer them no

schooling at all during pregnancy just to study the effect. This would be unacceptable to all concerned girls, teachers, parents, communities and one hopes researchers.

However, if the assumption that the program was to produce major changes in the girls' educational career is not operant, then the only expectation is that the special educational program will provide a place where the girls can go to school during pregnancy. In that case a control group is not necessary and two conclusions can be drawn from this study. On the one hand the McCabe Center provided education for 151 (84 per cent) of the girls in the study group and 86 per cent of these girls were still in school or graduated two months postpartum. Therefore, McCabe seems to be an effective means of providing schooling for girls during and immediately after pregnancy. On the other hand we have no evidence that the McCabe Center helped those girls who did not enroll and some of those who were independent attenders. This seems obvious enough, but despite a program's attempts to reach everyone, some pregnant teenagers will be very hard to reach. For supporters of special programs it is reassuring that this number was small (less than a quarter of the sample).

A third assumption limits the design of this study and thereby our ability to generalize from it. This assumption is that a special program in a separate school is the only way of providing schooling during pregnancy, except perhaps for homebound instruction. At the time this study was begun (1967) this assumption was valid because these were the only alternatives being considered in most areas of the country. However, some communities including Atlanta, Georgia, New York City and Azusa, California are now considering a third alternative, encouraging pregnant teenagers to remain in regular school. Some pregnant teenagers might do better in regular school, while others might do better in special school and this should be considered in future thinking about young mothers' education.

Special schools may create as many problems as

they solve. From the city's standpoint special programs duplicate existing facilities and may deprive regular schools of needed resources. From the young woman's standpoint pregnancy is a time when any girl may feel isolated from her reference groups¹ and special schools may increase this feeling by separating her from her peers. Other problems may arise from the small classes, intensive counseling, and sympathetic teachers which, while they make this the most pleasant school the girls have ever attended, unfortunately are available only to those who have become pregnant. Some administrators have voiced concern that special programs are so attractive that pregnancy becomes a decided advantage and report that the girls are aware of this irony.

In this study, girls who were in school when they registered for prenatal care were likely to enroll in the McCabe Center and were likely to be in school two months postpartum. Findings from previous studies^{2,3,4} where only special or no schools were available suggest that these girls would not have fared as well educationally in the absence of the special program. This comparison, however, leaves unanswered the question as to whether they would have fared as well had they been encouraged to remain in regular school.

If society is going to continue to finance special programs it should know what type of program is most effective. However, to do this society must first clarify its goals and set priorities. Does it want to separate pregnant teenagers from their peers? Is it necessary they be separated for them to continue their education? Is it more important to provide special services and small classes to a girl who is pregnant or to any teenager who needs them? Such clarification of goals must form a major part of any future evaluation of these programs.

Conclusions

Principal findings of this study of 180 pregnant teenagers who registered for prenatal care at the Young Mothers Clinic in New Haven were:

1. Thirty-eight per cent of the girls studied were below the grade appropriate for their age.
2. Eighty-three per cent of the girls enrolled in the special educational program at the McCabe Center. Those who were in school at the time they registered for prenatal care were most likely to enroll. However, girls whose stated educational goal was college were likely to enroll regardless of whether or not they were in school. This supports the premise that most pregnant teenagers, if allowed and encouraged to continue their education, will choose to do so and those with high educational goals will be the most likely to do so.
3. Girls under the age of fifteen, those with low educational goals, and those who were below the grade appropriate for their age were likely to be poor attenders at the McCabe Center.
4. Seventy-seven per cent of all the girls studied had graduated or were still in school two months postpartum. Among those who enrolled in the McCabe Center 86 per cent were in school or had graduated postpartum. The girls most likely to be in school were those who had been in school when they registered for prenatal care, those who attended the McCabe facility regularly, and those with high educational goals.

5. The data presented here suggest that a program such as the one at New Haven's McCabe Center is an effective means of enabling students to continue their education through pregnancy and into the postpartum period. These data cannot answer, however, the question of whether one special-educational program is more or less effective than other programs which attempt to keep pregnant girls in school. Answers to this question must await further clarification of goals for these programs.

6. The evaluation of any program for pregnant teenagers is limited by assumptions which are formed by society's expectations for that program; three such assumptions which apply to this study are discussed to show why it is difficult to generalize from this program's experience.

Appendix

Two methods were used to determine whether or not a girl was in the grade appropriate for her age. The first calculation was based on the system used in the 1960 United States Census. The Census distinguishes among students who are above grade, at grade, and below grade. Students below grade would be considered too old for their class. This method, which uses a student's age in whole years, permits broad categories. For example, a fifteen-year-old girl is considered at grade if she is in the ninth grade. However, she may, in fact, be 15 years old and in many school systems this would be considered too old for a ninth grader.

The second method used to determine whether a girl was in the appropriate grade for her age was based on her exact age and grade during a particular month of the year. The age at which a child normally enters kindergarten, in September (for New Haven from 4 yr. 8 mo. to 5 yr. 7 mo.), was used as the base. However, since school systems differ somewhat in setting these figures and some normal children first enter kindergarten when they are older than the maximum age, six months was added to the maximum age one might expect a child to be upon entering kindergarten. This gave a maximum age of 6 yr. 1 mo. for a child entering kindergarten in September.

Maximum ages were then calculated for all grades and for all months. Thus, if a girl were 15 yr. 1 mo. in September of the ninth grade she was considered in the appropriate grade for her age. However, if she were 15 yr. 2 mo., she was considered below the appropriate grade. No distinction was made between those above and those in the appropriate grade.

The two methods for determining appropriateness of grade were compared for the study population. All those who were below appropriate grade by the Census method were also below appropriate grade by the exact age-to-grade method. All those at or above appropriate grade by the exact age-to-grade method were at or above appropriate grade by the Census method (Table 1).

However, the exact age-to-grade method picked out 36 girls below appropriate grade who were not below grade by the Census method. Since the exact age-to-grade method seemed to be the more sensitive indicator of which girls were below appropriate grade, it was used in the data analysis.

¹U.S. Census 1960 PC (2) 5A, 5B

Appendix Table 1—Appropriateness of grade for age: Comparisons of Census and Exact age-to-grade methods

	1968 Census In or above appropriate grade (at or above Mode) (N = 148) %	Method Below appropriate grade (below Mode) (N = 32) %	Total Percent Exact Age-to-grade (N = 180) %
Exact age-to-grade Method			
In or above appropriate grade	75.7	—	62.2
Below appropriate grade	24.3	100.0	37.8
Total Percent Census (N = 180)	82.2	17.8	100.0

References

- Anderson, U. M. et al. The Medical, Social and Educational Implications of the Increase in Out-of-Wedlock Births. *AJPH* 56: 1844, 1966.
- Sattel, P. M. The University Hospital and the Teenage Unwed Mother. *AJPH* 57: 1308, 1967.
- Holmes, M. E. et al. A New Approach to Educational Services for the Pregnant Student. *Journal of School Health* 37: 148, 1970.
- Sattler, M. and Pennington, J. Unwed Mothers who Keep Their Children: Research and Implications. *Social Work* 10: 94, 1965.
- Sattler, M. and Rubenstein, E. Experiences of the Unwed Mother, as a Parent, Community Council of Greater New York, 1965.
- Sera, A. C., Bader, R. V. and Sweeney, E. *Minors—Laying Due to Pregnancy in an Urban Adolescent Population*. *AJPH* 54: 1, 1964.
- Holman, Charles W. *Pregnant High School Girls: An analysis and a Proposal*. Princeton and Graduate Journal 40: 184, 1962.
- Allyne, Glenn C. Trends in the Retention of Married and Pregnant Students in American Public Schools. *Sociology of Education* 45: 37, 1962.
- Kaplan, Lawrence W. *High Schools do about Student Mothers*. *National Schools* 67: 61, 1966.
- Watts, P. and Foyers, G. Boards still duck the problem of pregnant school girls. *American School Board Journal* 52: 4 (April 1970).
- Watts, Douglas L. Study of the Unwed Mother in the Public Schools. *Journal of Educational Research* 63: 128, 1969.
- O'Grady, H. M. et al. *An Interdisciplinary Program for Pregnant School Girls in Progress*. Report, 1968.
- Detroit Public Schools, Research and Evaluation Department. *Research and Evaluation of the Program to Continue Education of Girls who Must Leave School Because of Pregnancy*. Feb. 1969. Mimeographed.
- Hovell, S. M. *The Webster School*. U.S. Department of Health, Education, and Welfare (Children's Bureau), 1968.
- Loom, D. M. Development of Program for Pregnant Teenagers through cooperation of School Health Department and Federal Agencies. *AJPH* 58: 2221, 1968.
- Abowitz, C. B. The Unmarried Mother and the School System. *AJPH* 58: 2217, 1968.
- Sattel, P. M. and Klerman, L. V. The Young Unwed Mother: Obstetrical Results of a Program of Comprehensive Child, Adolescent and Gynecological Care. *Obstetrics and Gynecology* 23: 175-178, 1969.
- McIntyre, Georgia L. Project Team and a Community Action approach to Services for Pregnant Unmarried Teenagers. *AJPH* 58: 1844, 1968.
- Waters, S. J. *Adolescent Pregnancy: Program Progress Report for Fiscal Year 1968-69*. Cited in: *Sharing Among Comprehensive Service Programs for School-Age Pregnant Girls* 23: 1 (May 1969).
- Palmer, J. et al. *Out-of-Wedlock Births in New York City*. *Sociological Abstract* *AJPH* 51: 681, 1961.
- United States Census 1960 PC (2) 5A.
- Allyn, W. D. Birth Order and its Scientific Significance. *Psychological Bulletin* 70: 45, 1968.
- Bradley, R. W. Birth Order and School Related Behavior. *Psychological Bulletin* 70: 45, 1968.
- Birth Order and Mental Ability. *Lancet* 1: 1301 (28 June 1969).
- Bradley, R. W. and Santoro, M. P. Original Position of High School Students Identified by Their Teachers in Superior. *Journal of Educational Psychology* 60: 67, 1969.
- Sutton, F. C. *Education and Income*. New York: Viking Press, 1961.
- Robert, D. C. *Private Rates of Births to Education in the United States: A Case Study*. *Yale Economic Essays* 9: 89, 1969.
- Klerman, L. V. et al. *The Evolution of an Evaluation*. *AJPH*, publications pending.

ACKNOWLEDGMENT

The authors are indebted to the New Haven Department of Education, especially Dr. Raymond M. Klerman, Supervisor of Programs for the Physically Handicapped, Mrs. Mary Harnett, Director of the Public Health Center, and Mrs. Anne Colgate, Educational Coordinator of the McCauley Center, without whose assistance this study would not have been possible. The data and conclusions, however, are entirely the responsibility of the authors.

Mr. Paul H. Research Staff, Statistics in Public Health, Department of Epidemiology and Public Health, School of Medicine, Yale University, New Haven, Connecticut. Dr. Klerman is Lecturer, The Florence Heller Graduate School for Advanced Studies in Social Welfare, Brandeis University, Waltham, Massachusetts. Dr. Klerman is Associate Professor in Public Health Department of Epidemiology and Public Health, School of Medicine, Yale University, New Haven, Connecticut. The study upon which this paper is based was supported by Grant M-231, National and Child Health Service, Department of Health, Education, and Welfare. It was based, in part, upon the author's previous work. This paper was submitted for publication in June 1971.

Occurrence of subsequent pregnancies is often used to measure success or failure in programs for young mothers. This paper reviews methodological problems involved in measuring rates of subsequent pregnancies, proposes the use of a life-table method, and illustrates its use.

Subsequent Pregnancies Among Teenage Mothers Enrolled in a Special Program

Introduction

How can the success of a service program for teenage mothers be judged? One of the goals, sometimes only implicitly acknowledged, is the reduction or postponement of subsequent pregnancies of the school-age girls who enroll in special programs. Yet very little is now known about the comparative success of various programs in delaying so-called repeat pregnancies, partly because of the lack of reporting of analyses of comparable data. This paper will review the methodological problems involved in the measurement of rates of subsequent pregnancies, will propose the use of a life-table method as an appropriate measure, and will illustrate its use with data from New Haven.

Material

The larger study of programs for teenage mothers, of which the consideration of subsequent pregnancies is one segment, was designed as a prospective study involving 180 girls who registered in the special Young Mothers Program (YMP) Clinic at the Yale New Haven Hospital during the period from September 1967 through June 1969. Follow up information has been gathered for a minimum of two years after delivery.

Comparable data on subsequent pregnancies are available from two other samples. 1) A control group of 83 patients from the obstetrical clinics of the Yale New Haven Hospital who delivered during the period October 1963 through March 1965, prior to the inception of YAMP clinic, and 2) a group of girls who registered in the YAMP clinic from September 1965 through August 1967, and who were the subject of a previous retrospective study,¹ hereafter referred to as "YAMP Retrospective." The composition and comparability of these various samples are described elsewhere,² and will be referred to in the discussion which follows.

Definitions

Careful definitions of the phenomena under consideration are of utmost importance, especially if a measure of

John B. Cúrlie, Ph.D.; James F. Jekel, M.D., M.P.H.; and
Lorraine V. Klerman, Dr.P.H.

comparability among programs is an aim of the study. First, the characteristics of the participants must be described, since it would be misleading to compare the outcomes of several groups without taking into account their differing compositions. For example, the 180 "research eligible" participants in the YAMP, although they were all under 18 and single at registration, included 12 girls who had had at least one previous pregnancy. These girls might be excluded in other programs dealing only with primiparae. The date of entry into the YAMP was taken to be the first visit to the special clinic for teenage pregnant girls at the Yale-New Haven Hospital. Two girls had early miscarriages after their entry into the program, and were excluded from the research eligible sample. Thus, the 180 participants are not a sample of the population of single girls, 18 and under, who became pregnant, but only of a sub-population which fulfilled certain criteria of research eligibility for a particular study.

What is the definition of a subsequent or repeat pregnancy?³ Is the important question pregnancy *per se*, or delivery? This depends on the goals of the program. When considering the health and well-being of the girl as well as the measurement of efficacy of contraceptive measures, the primary interest is in the subsequent pregnancy, regardless of outcome. From the viewpoint of decreasing the burden of the care of another infant on both the girl and society, the primary interest is in live deliveries. What is the place of therapeutic abortion? Should it be classified as a successful form of birth control, albeit an inefficient and expensive one?

Is age at the time of the subsequent pregnancy a matter of importance? Should the marital status of the mother at the time of the subsequent pregnancy or delivery be entered into the equation, i.e. is it not "recidivism" if

³ The term subsequent means subsequent to the index delivery, as used in preference to the terms repeat or recurring, since some members of the original group were not primiparae, i.e. they were already "repeaters." Also it is felt that "subsequent" is a less judgmental term than "repeat."

the mother is now married? The common concern only with illegitimate births in this population seems simplistic in view of the age of the young mothers, the instability of marriages among the young, and the matrix of social, economic, and personal problems which often underlie the lives of participants in such programs.

These questions are posed to indicate that unless procedural definitions are made clear, the data are not clear, and unless goals are agreed on, the data cannot be interpreted in terms of the success or failure of a program. The discussion which follows, and the data presented, are not intended to prejudice the questions above, or to exhaust the possibilities of analysis.

Some Measures of Subsequent Pregnancies

Of the 179 YMP participants at risk for repeat pregnancies,^{*} 109 (60.9%) had terminated at least one subsequent pregnancy at the time hospital charts were reviewed in the early Spring of 1972. An additional 2 were known from information given in the hospital chart or at interview to be pregnant but had not yet delivered. Twenty three of the above 109 had two completed pregnancies subsequent to the index delivery. 12 had three subsequent terminations and one had four.

Age at the first subsequent termination ranged from 14 to 21 with a median age of 18. Thirty-three of the 109 (30.3%) were married before the time of the first subsequent termination, although some were separated or divorced from their husbands. Table 1 indicates that there is no clear relationship between age and marital status at the time of the subsequent termination.

The following rates might be calculated from this data: 109 of the 179 YMP participants had terminated at least one pregnancy subsequent to the index delivery (61%), and there were 159 terminated pregnancies (89%). Clearly, these rates do not provide a useful summary of subsequent pregnancy (or delivery or termination) experience since they depend on the time at which the information is gathered, and do not take into account the varying lengths of time that individual participants were at risk of becoming pregnant.

The need for standard and meaningful ways of expressing such subsequent events led Dempsey¹ to propose the following rate:

$$\frac{\text{Number of repeat out-of-wedlock deliveries per 24 months after the index delivery}}{\text{Total number of out-of-wedlock deliveries}}$$

The population at risk (the denominator) is assumed to be composed of adolescents in a program who have had a first out-of-wedlock delivery. (There is no theoretical reason why the denominator might not include all those who have delivered at least once out-of-wedlock, to accommodate multiparous.) The numerator consists of all (subsequent) out-of-wedlock deliveries among the population enumerated as at risk in the denominator.

This rate may be applied to the YMP prospective

Table 1—First Subsequent Terminations of Pregnancy among 179 YMP Participants: Age at Termination, by Marital Status

Age at subsequent termination	Total	Marital status	
		Single	Married
14	1	-	1
15	5	2	3
16	7	7	-
17	29	21	8
18	34	24	10
19	21	15	6
20	11	6	5
21	1	1	-
	109	76	33

sample. For example by the end of June 1971, 160 of the 179 YMP participants had completed a period of two years since index delivery. Included among these were 9 who were not primiparous at the index delivery and 5 who married before the index delivery, although single when they registered for the program. An additional 9 were lost to follow-up before the end of two years. Thus the denominator is reduced from 160 to 137.

Marriage further reduces the number at risk. Dempsey says that adolescents who marry before the recurrent event should also be dropped from the denominator. Consistency requires the removal also of those who had no recurrent event of delivery but who married before the end of the follow-up period. Of the 137, 17 were married before the termination of a subsequent pregnancy, and an additional 20 who had not yet delivered again were married within 24 months of the index delivery. Consequently the denominator has now been reduced to 100. Thirty-eight of these had a repeat delivery within 2 years of the index delivery, and 62 did not, so the rate of recurrent terminations according to Dempsey's criteria is 38/100, or 38.0 per cent over a 24 month period.

These 38 pregnancies resulted in 26 live infants (24 full term and 2 preterm). The remaining 12 consisted of 2 neonatal deaths, 1 stillbirth at 30 weeks gestation, 6 spontaneous abortions at less than 20 weeks, and 3 therapeutic abortions. Thus from the point of view of illegitimate children produced, the rate might be said to be 26/100, or 26 per cent.

The Life Table Method

Since one of the purposes of the analysis of subsequent pregnancies is to aid in the evaluation of ongoing programs, it is useful to provide a method which can give some measurement before all participants have been followed a given length of time, such as 24 months after delivery. There is also an interest in time relationships involved, e.g., how soon after the index pregnancy are these subsequent pregnancies taking place? A summary rate such as that proposed by Dempsey gives only one cross-sectional slice of a continuous process.

SUBSEQUENT PREGNANCIES AMONG TEENAGE MOTHERS¹, 1967

* One participant had a hysterectomy during hospitalization following the birth of the index infant; therefore was not at risk for subsequent pregnancy.

¹ For additional details and reasoning, consult the cited paper.

Rates based on the life-table approach appear to be suited to a study in which members enter at various times and have differing lengths of time of follow-up. They have been developed and used elsewhere in epidemiological situations, such as the analysis of survival after diagnosis and treatment for cancer,^{1,2} the study of mental hospital and psychiatric clinic populations,^{3,4} and measurement of contraceptive effectiveness.⁵ Among the advantages of this method are 1) presentation of data in a longitudinal aspect so that analysis can be carried to any desired point and rates at successive periods of time can be made usually meaningful by means of graphs, and 2) ability to use information about all participants in a program regardless of length of follow-up.

In order to have known time points for the calculation of the table, the event of interest is considered to be termination of pregnancy rather than the beginning of pregnancy. The latter (i.e., conception) can be used, but involves some assumptions about length of gestation, especially for cases which did not terminate in an infant of the normal maturity. Only first subsequent terminations are considered for convenience called "terminations."

Starting with a cohort of 179 YMP participants at index delivery, each is allocated to the appropriate interval at the time of either of two events: 1) first termination subsequent to index delivery? or 2) most recent date known not to have had a termination (i.e., date of last follow-up). Those who have terminated a pregnancy are assigned to the d_1 column. Those who are known not to have terminated a pregnancy and those who are lost to follow-up, appear in the w_1 column which means they are withdrawn from the table at the interval which specifies the time between index delivery and the latest date on which information is available. For each interval the proportion who terminated during that time interval is calculated (q_i column) using as the denominator the effective number at risk. The latter is equal to those who had not terminated at the beginning of the interval, less one-half of the number withdrawn or lost during the interval. Multiplying these interval probabilities (q_i) together results in the cumulative rate which in the traditional life table is the cumulative proportion surviving (P_i) but here is interpreted as the proportion of those who remained without a subsequent pregnancy termination through a given time after index delivery. The complement of this may be regarded as the rate of subsequent pregnancy termination.

Findings Using the Life Table Method

Thus for the YMP data in Table 2 the two-year rate of subsequent termination is 39 per cent, i.e. $100(1 - 61)$. Rates for other intervals are easily obtained. For example the 21-month rate mentioned by Dempsey as a possibly more useful time interval, is 31 per cent. Table 3 gives the cumulative proportion without subsequent terminations at various times after index delivery for the YMP (Prospective) group and two other samples—the Control group and the YMP Retrospective group. A graph of the samples is given in Figure 1. Like all statistics on a group which is

regarded as a sample of a larger population, the rates are subject to an amount of random error which depends to a large extent on the size of the group, or, more accurately on the effective number at risk. The standard error is shown for the rates at selected intervals in Table 3.

Comparison of the life table data shows that there is a significant overall difference in survival curves between the Prospective and Control samples, and between the Retrospective and the Control samples. Using the Mantel-Haenszel procedure,^{14,15} Chi-square values with 1 d.f. of 4.7 ($p < .05$) for the former and 15.1 ($p < .001$) for the latter are obtained. The Retrospective YMP group has consistently higher rates of those without subsequent terminations than the Prospective YMP group but the overall difference is not statistically significant. The YMP Retrospective group begins differing markedly from the Control after about one year following index delivery and this difference is sustained beyond three years. The curve for the YMP Prospective group, although on the whole significantly different from the Control, seems to be preceding approximately parallel to that of the Control group after about 18 months. After 33 months the curve for the Control group levels off, but that for the Prospective group continues at its previous rate. Since almost all of the information on which the present comparison is based comes from the records of one hospital, there should be no bias favoring one group over another, assuming comparable chart recording of such events as early terminations at the different time periods involved.

Table 3 and Figure 1 show the difference in the rapidly with which the three study populations lost their status of having no subsequent terminations. There are no major differences between the three groups by nine months following the index delivery, when termination would indicate an abortion or premature birth. However, between 9 and 18 months, there was a marked difference between the Control group on the one hand, and the other 2 groups on the other. By 18 months postpartum, almost half of the Control population had terminated a subsequent pregnancy, whereas less than one-quarter of the Retrospective and Prospective groups had. However, after this point, both the Retrospective and Prospective populations have a somewhat higher rate of subsequent terminations, and by 39 months postpartum the differences between the three groups are considerably less marked. The differences between the Retrospective and Prospective groups are consistent but less striking, with the Retrospective group showing a lower rate of subsequent terminations than the Prospective group. The possible reasons for these differences will be discussed below.

Two other life table calculations were made for the Prospective study group (Table 4). First, the rate of repeat terminations was calculated assuming the therapeutic abortions were considered as those who had therapeutic abortions did not have a completed pregnancy—that this was in effect a contraceptive method. This calculation of course, lowers the rates of subsequent terminations; for example, the 30-month rate of subsequent terminations is some 6 per centage points lower if the therapeutic abortions are not included as terminations (50% vs. $100(1 - 50) = 50\%$ vs. $100(1 - 44) = 56\%$).

The other calculation in Table 4 bases the d column on conception rather than termination of pregnancy.

¹ In a paper published since the present report was prepared, Dempsey and Ransaw¹⁶ discuss the life-table method and apply it to outcomes of postpartum and educational rates in a group similar to that described here.

Table 2—Probability of Having No Subsequent Termination of Pregnancy (Life Table Method) YMP Prospective Participants

Months after index delivery	No subseq. termination at beginning of interval	Termination during interval	Withdrawn not terminated during interval	Effective number exposed to risk	Probability of termination during interval	Probability of remaining not terminated during interval	Cumulative probability of remaining not terminated ^a
	(1 ₁)	(d ₁)	(w ₁)	(1 ₂)	(q ₁)	(p ₁)	(P ₁)
0-3	179	0	1	178.5	0.000	1.00	1.00
3-6	178	1	0	178.0	0.005	.994	.994
6-9	177	5	0	177.0	0.028	.972	.966
9-12	172	10	0	172.0	0.058	.942	.910
12-15	162	10	2	161.0	0.062	.938	.854
15-18	150	12	4	148.0	0.081	.919	.784
18-21	134	15	8	131.0	0.115	.885	.694
21-24	113	14	5	110.5	0.127	.873	.605
24-27	94	7	10	89.0	0.079	.921	.558
27-30	77	16	6	73.0	0.219	.781	.436
30-33	53	5	12	47.0	0.106	.894	.390
33-36	36	4	4	34.0	0.118	.882	.344
36-39	28	4	10	23.0	0.174	.826	.284

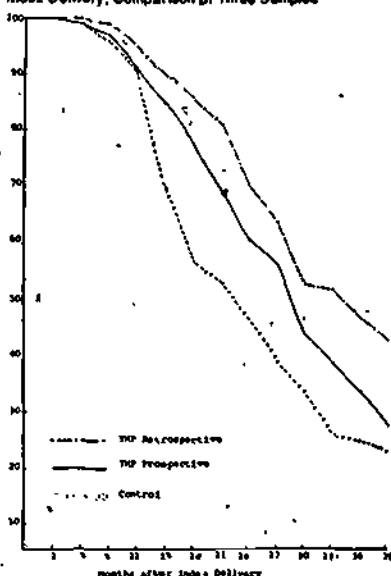
^a at the end of the interval

The date of conception was estimated utilizing the birth weight of the infant or for early terminations, the physician's assessment of duration of gestation, and other information gathered from the hospital or clinic record. If all conceptions terminated in full-term births, the curves based on conception and termination would be parallel with the only difference a displacement of 9 months on the time axis. When plotted on a graph (Figure 2) it can be seen that conceptions began early following the index delivery, and the cumulative proportion without subsequent conceptions gives a much smoother curve than that shown by terminations. This procedure has, however, the disadvantage of being based on an estimated date.

Table 3—Cumulative Proportion without Subsequent Termination of Pregnancy, at Specified Months after Index Delivery

Months after index delivery	YMP Prospective	Control	YMP Retrospective
3	1.00	1.00	1.00
6	0.98	0.98	1.00
9	0.97	0.96	0.99
12	0.91	0.90	0.95
15	0.85	0.70	0.90
18	0.78 ± 0.01	0.57 ± 0.06	0.88 ± 0.04
21	0.69	0.53	0.81
24	0.61 ± 0.08	0.47 ± 0.07	0.71 ± 0.05
27	0.56	0.39	0.64
30	0.44 ± 0.01	0.34 ± 0.04	0.53 ± 0.02
33	0.39	0.26	0.52
36	0.34 ± 0.02	0.25 ± 0.09	0.47 ± 0.04
39	0.28	0.23	0.43

Figure 1—Cumulative Percentage without Subsequent Termination of Pregnancy at Specified Intervals after Index Delivery; Comparison of Three Samples

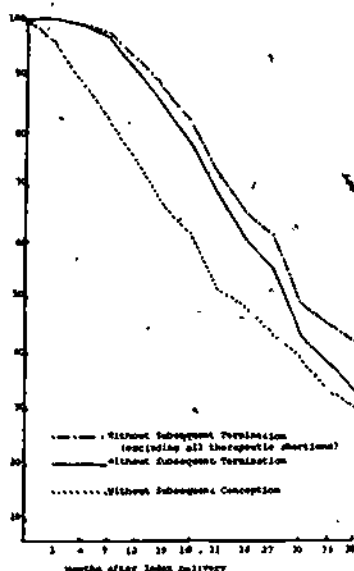


SUBSEQUENT PREGNANCIES AMONG TEENAGE MOTHERS 1609

Table 4—Cumulative Proportion in YMP Prospective Group at Selected Times with 1) No Subsequent Termination of Pregnancy, 2) No Subsequent Conception, and 3) No Subsequent Termination of Pregnancy Omitting Those with Therapeutic Abortion.

Months after index delivery	No termin of pregnancy	No conception	No termination (omitting therapeutic abortion)
3	1.00	0.98	1.00
6	0.98	0.89	0.94
9	0.97	0.82	0.88
12	0.91	0.75	0.83
15	0.85	0.67	0.76
18	0.78	0.62	0.62
21	0.69	0.52	0.73
24	0.61	0.46	0.66
27	0.56	0.44	0.62
30	0.44	0.40	0.50
33	0.39	0.34	0.46
36	0.34	0.31	0.43

Figure 2—Cumulative Percentage Remaining at Specified Intervals after Index Delivery, YMP Prospective Group



1610 JAPH DECEMBER, 1972, Vol. 82 No. 12

One advantage of the life-table method for evaluating an ongoing program is illustrated by the following. An earlier calculation made by the authors after only 34 of the participants had terminated a subsequent pregnancy gave a two-year rate of 36 per cent. The present calculation, based on 109 terminations, changed this only slightly (to 39%). Therefore, utilizing available information on all participants, rather than only on those who have actually completed a two year follow up period, makes possible an early, and reasonably accurate estimate.

Discussion of Life Table Comparisons

Two factors may account for the lower rate of subsequent terminations among the YMP Retrospective group: 1) differences in the nature of the programs between the 1965-67 period and the earlier (Control 1963-65) and later (YMP Prospective, 1967-69) periods and/or 2) selection of the participants in the YMP Retrospective group.

The YMP Retrospective sample participated in an intensive medical program. The obstetrical resident who developed the YMP gave them personalized care, delivered most of the babies himself, and attempted to maintain long-term communication with the mothers. He stressed the importance of family planning in enabling mothers to finish school. The YMP Retrospective sample probably received more personalized service than the Prospective YMP sample and this personalized contact in some cases continued for a number of years. This may explain not only the greater delay before subsequent pregnancies occurred but also the higher proportion of girls who have had no subsequent pregnancy. The YMP Prospective sample initially delayed subsequent pregnancies but by 18 months postpartum the effect of the program appeared to diminish, and the proportion of patients with subsequent deliveries was increasing at about the same rate as that of the Control group.

It must be noted however that the Control group is composed of all patients enrolled in the Yale-New Haven Hospital obstetrical clinics between Oct. 1963 and March 1965 who were 17 or under, single and residents of New Haven at registration and who delivered at the same hospital after 20 weeks gestation. The YMP Prospective sample met the same criteria as the Control with the additional requirement of registering in the special YMP clinic. Only 11 per cent of girls registering for obstetrical care at Yale, New Haven Hospital during the intake period for the Prospective group received care in a clinic other than the YMP clinic. The YMP Retrospective sample includes the patients enrolled in the program from its inception, including 18-year-olds. A review of hospital admissions has shown that a larger proportion of patients who met the present Prospective intake criteria did not receive care in the special (Retrospective) clinic. This might have had an effect on the rates of subsequent pregnancies.

One major difference between the Control group and the two YMP groups was that contraceptive advice and prescription was illegal in Connecticut until the summer of 1966. This fact obviously makes the earlier group a less than ideal control for the study of subsequent pregnancies. It is impossible to determine what portion of the differences observed may have been due solely to the greater availability of contraception since 1966.

Summary

The occurrence of subsequent pregnancies is often used as a measure of success or failure in programs for young mothers. The importance of accurately defining the event being measured and its relation to the goals of the program have been discussed.

The life-table method of presenting data on subsequent pregnancies is discussed. The two-year rate of subsequent pregnancy termination (without regard for legitimacy) is 39 per cent for the YMP group, compared to 53 per cent for a Control group receiving no special attention and 29 per cent for a previous group in the YMP which received a more personalized pattern of care. The life table method appears to have many advantages for ongoing studies.

References

1. Sargent, P. G., and Kistner, L. V. The Young Married Mothers. A. J. Obs. Gyn. 105: 575-578, 1969.
2. Kistner, L. V. et al. The Evolution of an Evaluation Methodological Problem in Studying Programs for Teen-Age Mothers. A. J. P. H. Publication pending.
3. Dempsey, J. Proposed Standard Measures of Recurrence of Out-of-Wedlock Births in Adolescents. Public Health Reports 84: 839-846, Oct. 1969.
4. Barlow, J. and Gage, R. P. Calculation of Survival Rates for Cancer. Proceedings of the Staff Meetings of the Mayo Clinic 25: 270, 1950.

5. Cutler, S. J. and Edner, F. Maximum Utilization of the Life Table in Analyzing Survival. J. Chron. Dis. 1: 698-712, 1958.
6. Kramer, M., Goldstein, H., Israel, B. H. and Johnson, N. A. Application of Life Table Methodology to the Study of Mental Hospital Populations. Psychiatric Research Reports 3. American Psychiatric Association, 1956.
7. Bahr, A. E. and Chandler, C. A. The Application of Life Table Methodology to the Study of Out-Patient Psychiatric Clinic Services. J. Chron. Dis. 15: 1143, 1962.
8. Bahr, A. E. and Bohnak, C. A Life Table Method for Studying Recurrent Episodes of Disease or Care. J. Chron. Dis. 17: 1019-1035, 1964.
9. Porter, G. Application of Life Table Techniques to Measurement of Contraceptive Effectiveness. Demography 11: 237-265, 1964.
10. Mantel, N. and Hazard, W. Statistical Aspects of the Analysis of Data from Retrospective Studies of Disease. J. Nat. Cancer Inst. 22: 719-748, 1959.
11. Mantel, N. Evaluation of Survival Data and Two New Rank Order Statistics Arising in Its Consideration. Cancer Chemotherapy Reports 10: 163-170, 1966.
12. Dempsey, J. and Ryan, G. P. The Use of Life Table in Expressing Follow-up Data. Perspectives in Maternal and Child Health, Series B. 3 November 1971.

ACKNOWLEDGMENT

The authors gratefully acknowledge the assistance of Melody C. Tyler in the preparation of this manuscript.

Dr. Cutler is Assistant Professor in Biometry and Dr. Jitel is Associate Professor in Public Health. Department of Epidemiology and Public Health School of Medicine, Yale University. With Honorary Consultant Dr. Kistner is Lecturer, Heller School for Advanced Studies in Social Welfare, Brandeis University, Waltham, Massachusetts. The study described in this paper was supported by Grant #1317 from the Maternal and Child Health Service, Department of Health, Education, and Welfare. This paper was submitted for publication in June, 1971.

Reprinted from AMERICAN JOURNAL OF OBSTETRICS AND GYNECOLOGY, St. Louis
Vol. 112, No. 1, Pages 3-19, January 1, 1973 (Printed in the U. S. A.)
(Copyright © 1973 by The C. V. Mosby Company)

An analysis of statistical methods for comparing obstetric outcomes: Infant health in three samples of school-age pregnancies

JAMES F. JEKEL, M.D., M.P.H.

JOHN B. CURRIE, Ph.D.

LORRAINE V. KLERMAN, Dr. P.H.

C. P. NOEL-McCARTHY, M.D.

PHILIP M. SARREL, M.D.

RICHARD A. GREENBERG, Ph.D.

New Haven, Connecticut, and Waltham, Massachusetts

Obstetric data on infants to be used in comparative studies should be reported in terms of the joint distribution of the relevant variables, in order that maximum statistical power may be achieved. A ranking test and a scoring method, both of which depend on the joint distribution of variables, are described and applied to the study data. The ranking test and the scoring method are shown to have greater statistical power to detect differences between programs than examination of individual variables by the chi-square test, and the scoring method has the advantages of simplicity and clarity in comparing the outcomes of several different programs. Infants of teen-age mothers who participated in a comprehensive program of medical, social, and education services (YMP) fared better at birth than infants of teen-age mothers who did not participate in such a program (control group). Infants of mothers who participated in a program of special educational and social services with routine medical services could not be shown to fare better than mothers in the control group. When the two special programs were compared directly, a statistically significant difference could not be demonstrated, although the program with the greatest emphasis on medical services (YMP) showed a tendency in the direction predicted.

From the School of Medicine, Yale University, and The Florence Heller Graduate School for Advanced Studies in Social Welfare, Brandeis University

The study described in this paper was supported by Grant MC-R-090048-05-0 from the Maternal and Child Health Service, H.S.M.H.A., Department of Health, Education, and Welfare

Received for publication October 1, 1971.

MANY STUDIES have attempted to determine whether prenatal care improves the outcome of pregnancy. Ethical considerations make it impossible to employ the experimental design necessary to answer the question with confidence. random assignment of pregnant women to obstetric-care groups and to no-care groups. Most reports

have compared the obstetric results of those patients who chose to receive care with the outcomes for those who did not or who received care only very late in pregnancy. In general, they have reported that patients who received prenatal care fare better. Such studies, however, are invariably subject to the criticism that the patients were self-selected, e.g., that those patients who came for care on their own initiative were more health conscious and motivated and, therefore, would have had better obstetric outcomes regardless of the presence or absence of care. (It is also possible, however, that those who come for care are the sickest.)

Another related kind of study focuses not on whether obstetric care is of value but on whether a special program of care has any advantage over a more "typical" program. Ideally, the same experimental design should be used. Patients should be randomly assigned to the special program being evaluated and to the usual program. However, service personnel are (justifiably) reluctant to assign patients to a program assumed to give "less" care, unless there is considerable doubt about the special program's added value. Moreover, if patients like the special program, they tell others who may demand admittance. Therefore, self-selection also enters into the evaluation of the outcomes of special programs. Minimizing the effect of self-selection becomes one of the most crucial aspects of the research effort.

The second kind of study, program evaluation, is increasingly being demanded by funding sources wishing documentation of positive effects. Statisticians* and others are searching for the tools appropriate in evaluative research. This paper will illustrate the advantages and disadvantages of several alternative statistical approaches to the analysis of obstetric results. Infant status will be used as the criterion, and the data will be taken from an evaluative study comparing three programs for teen-age mothers.

Description of programs

In 1965, a special clinic for unwed, pregnant, school-age girls was established within the Department of Obstetrics and Gynecol-

ogy at the Yale-New Haven Medical Center.^{1,2} In November, 1966, the Polly T. McCabe Center was started to enable school-age mothers to continue their education. The two components were coordinated to become the New Haven Young Mothers Program (YMP). The obstetric clinic was timed so as not to interfere with classes, and the young mothers-to-be would frequently come as a group from the school to "their" clinic. Initial prenatal care was given by an obstetric resident or by one of a group of three certified nurse-midwives. At the twenty-eighth week of pregnancy, the patients cared for by the obstetric resident were transferred to the staff obstetrician in charge of the clinic. This staff obstetrician was present for most of the deliveries of patients he saw, and the nurse-midwives were present at the deliveries of their patients, thus providing for more continuity of care than is usually found in a clinic population. The nurse-midwives performed uncomplicated deliveries on their own patients and gave nursing services to all of their patients. Complicated deliveries on nurse-midwife patients were done by the staff obstetrician or the resident on call with the assistance of the nurse-midwife. Two hospital-based social workers saw the patients in the clinic and in their offices. They also provided additional services in the more relaxed setting of the McCabe Center. The social workers, nurses, and obstetrician-in-charge led group discussions at the Center on many subjects, including pregnancy, labor, and delivery, the care of infants, family planning, and interpersonal relationships. The pregnant girls were encouraged to telephone their obstetrician or nurse-midwife at any time, to discuss any problems. The Center staff reinforced the importance of obstetric care and encouraged regular attendance at the special clinic. The girls were taken for a tour of the delivery floor prior to their expected date of confinement.

The second program studied was the Inter-Agency Services Program (IAS) in Hartford, Connecticut, which was a social agency-based educational program for school-age mothers. Educational services were provided by the Hartford Board of Education;

social work services, by Children's Services of Connecticut, and nursing services, by the Hartford Visiting Nurse Association. Although there was a strong program of health education through the Public Health nurse assigned to the school, the mothers made their own arrangements for obstetric care or were referred by the school. Each received care from the clinic of one of the three hospitals in Hartford providing obstetric care or from a private physician. It was anticipated, therefore, that the obstetric care would be of high quality, although without the emphasis on continuity and personalized care for this age group and without the close coordination with the school program that characterized the Young Mothers Program.

Specifically, the study subjects for these two programs were pregnant women who met the following criteria upon registration for the obstetric clinic (New Haven) or the IAS school (Hartford): (1) 17 years of age or under, (2) unmarried, (3) resident of the city (Hartford or New Haven), and (4) pregnancy terminated after the twentieth week.

Intake into the research groups ran almost concurrently for the YMP and IAS program (from September 1, 1967, in both study groups to June 30, 1969, in the YMP group and September 1, 1969, in the IAS group). It was not possible to find a comparable control group in these cities during the same time, because most of the girls meeting the criteria above were in the special programs. To use as a control group those who were married or older or residents of some other area did not seem advisable because of the lack of comparability. Therefore, it was decided to use patients meeting all of the above criteria who were delivered at the Yale-New Haven Hospital from October 1, 1963, to March 31, 1965, just prior to the beginning of the special Young Mothers Program. This procedure did not exclude the possibility that the quality of care might have changed sufficiently over the 4 year period to introduce some systematic bias into the comparative study, but the research staff felt that there would be fewer problems introduced in this way than by using a different population group.

This "control" group received care in the obstetric clinics of the Yale-New Haven Hospital. There was no special educational program, although homebound instruction was available to pregnant girls.² Social work services were dependent upon the resources of the hospital.³

The three study groups were similar on most demographic variables,⁴ although the control group was slightly older than the YMP or IAS groups (Table I). The generally younger age of the YMP participants would be expected to work against the likelihood of good obstetric outcomes, so, if they showed better outcomes, the differences might be attributed to the care received.

There were some differences in the average length of gestation at the time of clinic admission. The average week of gestation at admission to the YMP was 22.4, for the IAS, 20.0, and for the control group, 24.0. All these differences were statistically significant; their importance to the obstetric outcomes will be discussed subsequently.

Eighty-eight per cent of pregnant teenagers meeting the above criteria who registered for obstetric clinic care at Yale-New Haven Hospital during the intake period were cared for in the YMP clinic. Only 22 eligible girls (11 per cent) chose the regular obstetric clinic over the YMP clinic or by mistake were not referred to the YMP. Seventeen of these 22 girls were black and 5 were white. One would expect, therefore, that the YMP and control groups would be very similar in characteristics which influence the choice of medical care. However, the YMP clinic was fairly well known, and its reputation may have caused some girls to register there who might have gone elsewhere, had there been no special clinic, and the McCabe Center may have been an influence causing some to attend the YMP clinic. On balance, these two groups were probably very similar, although not as much so as two groups of a randomized split sample.

The IAS group in Hartford consisted of those who elected to attend a special school; they were, therefore, self-selected primarily to attend a school rather than a medical-

Table 1. Comparison of the study groups on demographic variables

	YMP		IAS		Control	
	No	%	No	%	No	%
<i>Age at registration</i>						
14 or less	35	19.4	13	8.1	4	4.8
15	34	18.9	43	26.9	14	16.9
16	62	34.4	59	36.9	31	37.3
17	49	27.2	45	28.1	34	41.0
<i>Race</i>						
Black	169	93.9	152	95.0	74	89.2
White, not Puerto Rican	6	3.3	5	3.1	5	6.0
White, Puerto Rican	5	2.8	3	1.9	3	3.6
"Mulatto"					1	1.2
<i>Previous pregnancies</i>						
0	168	93.3	146	91.3	74	89.2
1	10	5.6	14	8.7	6	7.2
2	2	1.1	-	-	3	3.6
<i>Birthplace</i>						
New Haven (Hartford for IAS)	66	36.7	59	41.8*	29	34.9
Southern states	86	47.8	57	40.4*	45	54.2
Middle Atlantic states	14	7.8	6	4.3*	4	4.8
Other	14	7.8	19	13.5*	5	6.0
Unknown	0	-	19	-	0	-

*Percentages based on those for whom birthplace was known

care facility, and only secondarily were they required to obtain medical care. The Hartford sample is demographically similar to the other two samples, but the possibility exists that there are unmeasurable differences since they were self-selected in a different way than were the two samples from New Haven.

Study method

Study design. The over-all study design called for a comparison of three groups of young mothers on a wide range of outcome variables relating to health, educational achievement, and ability to cope with their problems. The research protocol included the following specific hypothesis: The infants of the mothers actively participating in the YMP will be significantly healthier at birth... than will infants of similar mothers enrolled in other prenatal care programs.

The attempt to test this hypothesis led to the consideration of methodological problems presented in this paper. An earlier article contains additional details of the study design and a discussion of problems in evaluative research.*

Data collection. Clinical data were collected from hospital records with the use of identical instruments in New Haven, where they were abstracted by a registered nurse, and in Hartford, where they were recorded by an individual experienced in abstracting hospital data for maternal and infant care programs.

Indicators. Three indicators were used: (1) survival (live baby or fetal or neonatal death); (2) birth weight; and (3) Apgar score. An infant was considered "immature" if its birth weight was less than 1,000 grams and "premature" if its birth weight was between 1,000 and 2,199 grams. The 5 minute Apgar score was used as an index of fetal condition at birth in preference to the 1 minute Apgar score, since it was more consistently available and was considered to be more reliable.

Only three indicators were chosen, partly to reduce the complexities of the analysis but primarily because they were felt to be the most useful variables by which to evaluate the effectiveness of the program as it relates to infant health. Congenital anomalies were

not included because their presence or absence is not a good indicator of the quality of obstetric care received. Birth injuries, ordinarily an important indicator of quality of care, were excluded because of evidence of a systematic reporting difference among the hospitals in Hartford and New Haven.

Methods of comparison

Single indicators. The most common form of presentation of obstetric results is in tabular form by single indicators, such as perinatal mortality rate and prematurity rate. The results of one program are compared with another or with some standard. An appropriate test of significance, such as the chi-square test, usually is applied to evaluate the difference between the two programs on each indicator. A probability level (conventionally $p = 0.05$) is selected before applying the test. Although this method of presentation and analysis has the advantage of simplicity, there are problems in using such findings to evaluate programs.

First, when the numbers involved are small, real gain in terms of maternal or infant health may be obscured by the inability to demonstrate statistical significance. In this situation, the problem is not only that the usual chi-square approximation no longer applies, but, more importantly, the test has little power to detect a significant difference. While Fisher's exact test can give the correct probabilities, it cannot increase the power of the test. Second, when the data do not consistently favor one program over another, how is one to decide which program, on balance, produced the better outcome? Third, individual presentation of the variables disguises the fact that they are not independent, e.g., that a fetal or neonatal death is more likely to occur in a premature infant and/or one with a low Apgar score. Moreover, 10 deaths and 10 premature infants are presumably more serious if they are found in 20 different infants than if they occur in the same 10 infants, because one has 10 cases of morbidity and 10 deaths instead of 10 deaths only. In other words, examining the results vari-

able-by-variable obscures their "joint distribution," i.e., how the different indices are combined in individual infants.

Applying the method of analysis by single indicator to the groups under study reveals that the YMP group did better than the control and IAS groups on each of the indicators (Table II). However, since the numbers are small and none of the differences are statistically significant (with the use of the chi-square test corrected for continuity or the exact test), this method of analysis does not support the hypothesis that the YMP program resulted in superior obstetric outcomes. Before rejecting the study hypothesis, however, other statistical tests were explored.

The sign test. Given the fairly small size of the samples and the availability of a number of indicators, the sign test is sometimes considered. In using this test to compare two programs, the program showing the better outcome on a given indicator is given a "plus," and the other a "minus". The hypothesis that the observed distribution of pluses and minuses would have occurred by chance, given no difference in the programs, is then tested. The sign test, however, is not applicable in this situation since it requires that the variables be independent of each other, and that is not true here. Moreover, this test is not useful unless there are at least 5 independent variables, because no combination of 4 or fewer outcomes could be statistically significant at the 5 per cent level.

Ranking tests. A ranking test, or "rank order test," is valid even when the variables are not independent. It requires the utilization of judgment concerning the relative importance of the indicators, and these judgments must be applied in advance in order to be unbiased. The ranking test, however, loses much of its statistical power if many observations fall in the same cell, i.e., are in the same outcome category, and a large number of "ties" result. This is true of the data under study, as shown in Table IV. Moreover, the calculations of the ranking test are somewhat more complicated than the chi-square test for a sample of this size.

To perform a ranking test, one arranges

Table II. Comparison of YMP, IAS, and control group in terms of infant outcomes on three indicators

	Young Mothers' Program (YMP) (No = 180)		Inter Arterial Services (IAS) (No = 160)		Control (No = 87)	
	No	%	No	%	No	%
Survival						
Late fetal deaths	0	0.0	3	1.9	3	3.6
Hebdomadal deaths	2	1.1	2	1.3	2	2.4
Living	178	98.9	155	96.9	78	94.0
Prematurity						
999 grams or less	2	1.1	2	1.3	2	2.4
1,000 to 2,499 grams	19	10.6	23	14.4	15	18.1
2,500+ grams	159	88.3	135	84.4	66	79.5
Apgar scores (5 min)						
0-3	4	2.2	5	3.1	5	6.0
4-6	6	3.3	9	5.6	4	4.8
7-10	170	94.4	146	91.2	74	89.1
Significance tests						
Between YMP and control						
Survival χ^2 (1 d.f.) = 3.57 ($p = 0.06$), Fisher's exact test $p = 0.068$						
Prematurity χ^2 (1 d.f.) = 2.89						
Apgar χ^2 (1 d.f.) = 1.65, χ^2 (2 d.f. 0 to 6/7 to 10) = 2.37						
Between YMP and IAS						
Survival χ^2 (1 d.f.) = 0.85						
Prematurity χ^2 (1 d.f.) = 0.82						
Apgar χ^2 (2 d.f.) = 1.36						
Between IAS and control						
Survival χ^2 (1 d.f.) = 0.55						
Prematurity χ^2 (1 d.f.) = 0.59						
Apgar χ^2 (2 d.f.) = 1.21						

the individual outcomes from the most serious to the most desirable (Table III). Next, the same is done for each possible combination of outcomes. Fetal death is used as the only indicator when it is present, since the other variables have no meaning in terms of the possibility of salvage of a live baby (Table IV). The same results would follow if the reverse order (from most to least desirable) were used.

For the test of difference among all 3 sets of ranks, the Kruskal-Wallis test statistic H equals 5.14. This is equivalent to the chi-square test with 2 degrees of freedom, and consequently the differences are not significant ($0.05 < p < 0.10$). With the data analyzed in pairs, equivalent to the chi-square test with 1 degree of freedom, the results

5.15 ($p = 0.023$), YMP and IAS (YMP better), $\chi^2 = 1.88$, IAS and control (IAS better), $\chi^2 = 1.17$.

Since the first of these differences is statistically significant, this substantiates the hypothesis in that the YMP group has better results than the control group. The hypothesis also stated that the YMP group should show better outcomes than the IAS group (YMP would be better than "other programs"), and, although the results were in the predicted direction, they did not reach statistical significance.

The difference between the YMP and control groups did not reach statistical significance with the use of the chi-square test on separate indicators. The gain in statistical power was due to the fact that the ranking method permits the combination of data and

Table III. Rank ordering of obstetric outcomes by major classification from the least to the most desirable

Classification	Symbol
Fetal death	A ₁
Hebdomadal death	A ₂
0 to 999 grams birth weight	B ₁
Apgar score 0 to 3 (5 min)	C ₁
1,000 to 2,999 grams birth weight	B ₂
Apgar 4 to 6 (5 min)	C ₂
Live baby after 1 week	A ₃
2,500 grams or more birth weight	B ₃
Apgar score of 7+	C ₃

thus the test is accomplished on more information than in the case of the chi-square test on individual variables

The ranking test involves classifying the total number of cases into all possible outcome categories; in this study, there are 19 categories. A summary method which avoids the laborious calculations of the ranking test is to consider merely the dichotomy between those who ranked in the highest category and all the others. A two-by-two table results, for example, in the comparison of YMP and control: the best category ("no deficiency") has 154 cases in the YMP sample and 62 cases in the control sample. All the other categories combined have totals of 26 and 21, respectively. The chi-square test (corrected) on this table equals 3.85 which is just significant at the $p = 0.05$ level. Comparison of similar dichotomies for the IAS vs. control and the YMP vs. IAS show differences which are not significant.

In this example, therefore, approximately the same conclusions are reached by this summary method as by the full ranking test, but its power is less than the full ranking and not much more than that of the chi-square method. Although this summary is clearly quite easy to apply, it is doubtful whether its results will be equivalent to the full ranking test frequently enough to permit substitution for the more powerful method.

Scoring method. With the exception of the Apgar scoring system, scoring or grading systems are not used commonly in reporting

Table IV. Joint distribution of obstetric outcomes according to 3 variables (survival, birth weight, Apgar scores) in 3 programs for teen-age mothers

Obstetrical outcome	Program		
	YMP	IAS	Control
Live fetal death (A ₁)		3	3
Hebdomadal deaths			
A ₁ B ₁ C ₁	1	1	1
A ₁ B ₁ C ₂			
A ₁ B ₁ C ₃			
A ₂ B ₁ C ₁	1		
A ₂ B ₁ C ₂			
A ₂ B ₁ C ₃			
A ₂ B ₂ C ₁			
A ₂ B ₂ C ₂			
A ₂ B ₂ C ₃			
A ₃ B ₁ C ₁			
A ₃ B ₁ C ₂			
A ₃ B ₁ C ₃			
A ₃ B ₂ C ₁			
A ₃ B ₂ C ₂			
A ₃ B ₂ C ₃			
Surviving infants with deficiencies at birth			
A ₁ B ₁ C ₁			
A ₁ B ₁ C ₂			
A ₁ B ₁ C ₃			
A ₂ B ₁ C ₁	1		
A ₂ B ₁ C ₂			
A ₂ B ₁ C ₃			
A ₂ B ₂ C ₁	1	1	
A ₂ B ₂ C ₂	1	3	2
A ₂ B ₂ C ₃	16	17	11
A ₃ B ₁ C ₁	1		1
A ₃ B ₁ C ₂	4	6	2
No deficiencies at birth	154	128	62
A ₁ B ₁ C ₁			
	180	160	83

obstetric results. Recently, however, Nesbitt and Aubry¹ described a semiojective grading system which levied penalties against presumed adverse obstetric risk factors in mothers and predicted the outcomes from these. They found that patients who were at high risk according to their grading system had approximately twice the chance of a poor perinatal outcome as those who were graded as moderate to good risks. Their system appears to have promise as a method for determining high-risk patients who require special care.

This paper attempts to develop a somewhat similar grading system for use in comparing the quality of care between programs, by levying penalties against poor obstetric outcomes. One advantage of this approach, as in the ranking test, is the fact that each

Table V. Schedule of assignment of infant health penalty points in comparing YMP, IAS, and control programs

Category	Penalty points	Situations in which penalty points apply
Late fetal death	100	Whenever present, others not counted
Hebdomadal death	75	Whenever present, others not counted
Infant in most first week		
Immature (birth weight < 1,000 Gm)	50	
Very low Apgar (0 to 3) (5 min)	50	Not counted if baby died or if baby was immature
Premature (birth weight 1,000 to 2,499 grams)	25	Not counted if more severe penalty applies
Low Apgar (4 to 6)	25	Not counted if prematurity or more severe penalty was present
No defect	0	

individual infant is considered in establishing the penalties. Therefore, if a neonatal death, low birth weight, and a low Apgar score are all found in the same patient, the penalties are not additive, but only the condition carrying the largest penalty is assessed. This provides a method for utilizing information from several variables while still dealing with the problem of association among variables. Moreover, this method provides a way of giving greater weight to those variables considered the most important. Other features are that the score is independent of sample size, it is directly comparable with other programs or with a standard, and the difference in mean scores of two programs can be tested for significance.

For this study, arbitrary penalty points were assigned for suboptimal infant obstetric outcomes, and these were subtracted from 100 points to give the score for each infant (Table V). A fetal death was considered a total obstetric failure with 100 penalty points, as a score of 0. A hebdomadal death was considered almost as bad, but, since the infant was born alive in most cases there was some chance of saving it, and only 75 penalty points were subtracted. A very small infant that survived (immature, less than 1,000 grams) was penalized 50 points, since the risk of death or permanent damage is high in this group. A very low Apgar score (0 to 3) indicates severe fetal distress and also was assigned 50 points, if that was the most severe indicator. If,

however, the infant was immature, the low Apgar score would usually be related to the immaturity and not indicate a new condition, so that only 50 penalty points would be subtracted. One could argue that an immature infant with a good Apgar score is better off than one with a bad Apgar score and make the scoring system more complex accordingly. However, the gain did not appear worth the added complexity. In like manner, prematurity (birth weight of 1,000 to 2,499 grams) and an Apgar score of 4 to 6 were assigned 25 penalty points each or in combination. If a more severe condition were present, these 25 penalty points would not be added to those assigned to the more severe condition.

Table VI shows the results of applying this scoring method to the three programs described in this paper. The first and most important step in this scoring method is to create a table showing the joint distribution of the outcomes (Table IV), then the number of cases in each category is multiplied by the number of penalty points for that category to determine a mean or average score for each program by the following formula:

$$\text{Average score} = \frac{100 \sum (\text{penalty points})}{N}$$

$$= 100 - \left(\frac{\sum (\text{penalty points})}{N} \right)$$

This gives a single score for the purposes of comparison with either other programs

Table VI. Penalty points and average score by program (slightly rearranged from Table III to permit grouping by penalty points)

Categories	Penalty points per infant	YMP (No = 180)		IAS (No = 160)		Control (No = 83)	
		No	Penalty	No	Penalty	No	Penalty
Fetal death	100	0	0	3	300	2	300
Hydromodal death							
A.B.C.	75	1	75	1	75		75
A.B.C.	75	1	75				75
A.B.C.	75			1	75		75
A.B.C.	75						
Living child - deficiency at birth							
A.B.C.	50	1	50				
A.B.C.	50	1	50	1	50		
A.B.C.	50	1	50			1	50
A.B.C.	25	1	25	3	25	2	50
A.B.C.	25	16	400	17	425	11	275
A.B.C.	25	4	100	6	150	2	50
No deficiency at birth							
A.B.C.	0	134		128		62	
Totals		180	825	160	1150	83	875
Average score 100 -	Penalty points	100 - $\frac{825}{180}$	100 - 4.6 = 95.4	100 - $\frac{1150}{160}$	100 - 7.2 = 92.8	100 - $\frac{875}{83}$	100 - 10.5 = 89.5

or a standard. In this case, the YMP mean score (95.4) was better than that of the control group (89.5), and the IAS score 92.8 fell midway between (Table VI).

A simple statistical test to determine the significance of observed differences in the mean scores depends on the assumption that these mean scores are normally distributed. In spite of the fact that the scores themselves are clearly not normally distributed (e.g., for the YMP some 86 per cent of infants received no penalty points, and those receiving 100 points), we can take advantage of a statistical theorem which states that regardless of the distribution of the individuals in a sample the means of samples will be approximately normally distributed if the sample size is sufficiently large.

To test this assumption of normality of means, computer simulations were carried out, with the use of the distribution of scores observed in the YMP sample. One thousand means were obtained for sample sizes of 200, 100, and 50. The conclusions are that,

even with a sample size as small as 50, the means are sufficiently normal to utilize tests of significance which depend on the assumption of normality.

Consequently, the difference in the mean score between the YMP and control groups, 95.4 and 89.5, gives a Z value of 2.7, which is significant ($p < 0.01$), while differences between the other samples are not. Thus, the scoring method produced findings similar to the ranking test. The fact that the "p" value was smaller for the scoring method than for the ranking test should not lead one to suppose that it is necessarily a more powerful statistical test. The significance test for the scoring method depends upon a second assumption in addition to that of normally distributed means of scores. It assumes that the obstetric outcomes can validly be assigned numerical scores on an interval scale. The accuracy of the "p" value determined from the scoring system thus also depends on the extent to which the scoring system approximates a valid interval scale. Fortu-

nately the validity is not seriously compromised by even moderate departures from a true interval scale. One can say that if the scoring method represents a valid way of measuring the quality of outcomes on an interval scale, the observed differences between the YMP group would not have occurred by chance. The ranking test, however, is as powerful a test as can be applied to ordinal data, i.e., data which are ordered without interval differences between the ranks being assigned.

Comment

One purpose of this methodological paper was to extract the "last drop" (maximum statistical power) out of the data. We realize that all of the generally accepted conventions regarding statistical significance are arbitrary, and we are aware of the debate currently going on regarding the usefulness of the very concept of "statistical significance." We do, however, believe that in program evaluation, as in other forms of scientific research, it is exceedingly important that the arbitrary use of judgment be applied before the data are examined, rather than afterward, and the conventional use of statistics makes this possible. This paper will be of little interest to that person who rejects the use of statistical tests, but we hope it will assist others to utilize their available data more fully.

Although the quantitative gain in statistical power is not large in the methods described here, it appears to be worth the small added effort required by the analysis. Certainly the time involved in the analysis is minimal compared to the cost of the clinical program being tested or even that of the data collection procedures. Of the tests used in this paper, the ranking test has the greatest statistical validity, but the scoring method is easier to use in making subsequent comparisons. Both, however, depend on displaying the relevant variables in their joint distribution in order that the maximum amount of information, and hence the maximum statistical power, may be achieved.

With the use of either the ranking or the scoring method, the data support the hypothesis stated above insofar as the YMP is concerned, namely, that the YMP group did produce healthier babies than did the control group mothers. The difference does not appear to be explained by biased selective factors, since the mothers were very similar. The somewhat older age of the control group mothers would be expected to favor the control group's outcomes, if it had any effect at all. Because the YMP deliveries were, on the average, over 3 years later than those of the control group, the possibility remains that the explanation for some or all of this difference may be related to improvement in obstetric and newborn care practice during that time. The IAS program, however, could not be shown to produce better obstetric outcomes than those found in the control group.

Another difference between the study groups was the average length of gestation at the time of registration for obstetric care. The importance of this is not clear. The control patients registered later than those in the YMP and IAS groups, and their outcomes did not appear to be as good. On the other hand, the IAS group registered earlier than the YMP group, but the YMP's outcomes were, if anything, better than those in the IAS group. If the time of registration were causally related to obstetric results, then some other factor must have been present in the YMP group to counteract the negative effect of the delay in registration. It is also possible that the differences, though small, were too small to have a measurable impact on outcomes.

It would appear, then, that a comprehensive program which included a special obstetric clinic for teen-age mothers (YMP) produced better obstetric results than routine clinic care without the other services of the special program (control), but another special program for teen-age mothers, where medical care was obtained in regular obstetric clinics (IAS), could not be shown to produce better obstetric results than the control program.

REFERENCES

1. Sarrel, P. M. *Am. J. Public Health* 57: 1308, 1967
2. Sarrel, P. M., and Klerman, L. V. *Am. J. Obstet. Gynecol.* 105: 575, 1969
3. Holmes, M. E., Klerman, L. V., and Gabrielson, I. W. *J. School Health* 40: 168, 1970
4. Schleesinger, R. H., Davis, C. D., and Muliken, S. O. *Am. J. Public Health* 52: 1844, 1962
5. Klerman, L. V., Jekel, J. F., Corne, J. B., Gabrielson, I. W., and Sarrel, P. M. *Am. J. Public Health* In press
6. Siegel, S. *Nonparametric Statistics for the Behavioral Sciences*, New York, 1966, McGraw-Hill Book Company, Inc.
7. Nesbitt, R. E. L., and Aubry, R. H. *Am. J. Obstet. Gynecol.* 105: 972, 1969
8. Morrison, D. C., and Henkel, R. E., editors. *The Significance Test Controversy*, Chicago, 1970, Aldine Publishing Co.

Reprinted from *AMERICAN JOURNAL OF PUBLIC HEALTH*, Vol. 60, No. 12, December, 1970
Copyright by the American Public Health Association, Inc., 1740 Broadway New York, N. Y. 10019

Attention is directed to an apparently high-risk of attempted or threatened suicide in a cohort of young women who were pregnant before age 18. Factors related to suicide attempts are discussed and stress is placed on the need for preventive action, including early detection and intensive treatment of long duration for suicide-prone girls and for those who threaten or attempt suicide.

SUICIDE ATTEMPTS IN A POPULATION PREGNANT AS TEEN-AGERS

Ira W. Gabrielson, M.D., F.A.P.H.A.; Lorraine V. Klerman, Dr.P.H., F.A.P.H.A.; John B. Currie, Ph.D.; Natalie C. Tyler, R.N.; and James F. Jehel, M.D., M.P.H.

PREGNANCY, childbearing, and motherhood are normal biological events rather than disease processes, but even in the mature married woman they disturb the usual pattern of social life. For the teen-age girl, particularly if unmarried, pregnancy and the events which follow are especially likely to cause difficulty for the individual, those immediately associated with her, and society.

Other authors^{1,2} have reviewed some of the problems associated with teen age pregnancies, such as disrupted education, welfare dependency, and increased fertility. A review of the medical records of 105 pregnant females 17 years of age or younger admitted to the Yale-New Haven Hospital for delivery during 1959 and 1960 suggested an additional potential difficulty—the possibility of suicide—threatened, attempted, or actually committed. This study revealed that 14 of the young mothers were known to have made subsequently one or more self-destructive attempts or threats serious enough to require care or to be reported to a physician at the hospital.

• The study population received its obstetrical care in the period before the emphasis on programs for teen-age mothers. Some were patients of private physicians, but the majority were seen by obstetrical residents, medical students, and staff physicians in the general obstetrical clinic.³ As a group they were offered no special social services, although in individual cases the need was so obvious that a social worker was assigned. They were excluded from school when their condition became apparent and limited educational alternatives were provided.⁴

Today in New Haven, and in many other cities throughout the United States, such girls are being offered programs that include unified medical care, augmented social services, and special educational provisions. It is hoped these programs will make a significant difference in the life of these young mothers and their children. Some reports are already indicating lower rates of medical complications among mothers and infants⁵ and decreases in early school terminations.⁶ Studies now under way may show that the attention being

Table 1—Selected characteristics of patients who made suicide attempts or threats

No.	Age at first 1959-1960 delivery	Race	Religion	Marital status at registration	At attempt				Agent(s)	Other significant problems or diagnoses
					Age	Marital status	Completed pregnancies	Months since last delivery		
* 1	17	Black	Protestant	Single	20	Single	1	45	Wrist laceration	Two previous suicide attempts; termed "ambulatory psychotic" by psychiatrist — depressed, disoriented; pelvic inflammatory disease; much lung disease; lobectomy (1964)
2	15	Black	Catholic	Single	17	Single	2	20	Ammonia	Patient claimed she drank ammonia; examination was normal; returned to girls reformatory
3	15	Black	Protestant	Single	22	Separated	3	60	15 antihistamine tablets	Depressive reaction after marital separation
4	16	Black	Protestant	Single	23	Married	7	7	Sleeping pills	Pelvic inflammatory disease treated two days earlier
5	16	Black	Protestant	Single	17	Single	1	7-mo pregnant (2nd pregnancy)	12 anacin tablets	
6	16	Black	Protestant	Single	18	Married	1	20	Attempted to slash self with razor and to set clothes on fire	Hospitalized in state mental hospital (1961); marital quarreling; pelvic inflammatory disease

VOIC 66, NO. 12, A-17

Table 1--Continued

No.	Age at first 1959-1960 delivery	Race	Religion	Marital status at registration	At attempt			Agent(s)	Other significant problems or diagnoses
					Age	Marital status	Completed pregnancies	Months since last delivery	
7	13	Black	Catholic	Single	17	Married	3	31	Hand laceration* Put hand through window on Christmas Day; marital discord; blunt affect
8	17	White	Catholic	Married	18	Married	1	3	10-15 aspirin tablets Overdose of sleeping pills at age 14; took aspirin on 16th birthday after argument with husband
9	17	White	Catholic	Married	24	Separated	2	69	Wrist through window Treated in psychiatric clinic for severe psychoneurosis related to broken marriage; pelvic inflammatory disease
10	17	Black	Protestant	Single	18	Married	2	4	Jumped 3 stories Pelvic inflammatory disease
11	16	White	Catholic	Single	22	Separated	3	18	Tranquilizer Treated in psychiatric clinic; husband and boyfriend narcotics addicts
12	17	White	Catholic	Married	25	Married	3	33	Laceration of wrists Depressed; disoriented
13	17	White	Catholic	Married	17	Married	1	1	Threatened suicide and child abuse Acute anxiety one month post-partum; infant found bloody
14	17	White	Catholic	Divorced	18	Divorced	1	5-mo pregnant (2nd pregnancy)	Fearful of suicide and infanticide Previous suicide attempt with aspirin; hospitalized in state mental hospital for "nervous breakdown" (1958); seen frequently for anxiety

paid to the psychological aspects of pregnancy and the early child-rearing period result in mothers better able to cope with the physical and emotional problems of their environment. If the programs are able to accomplish these goals, a marked reduction in the number of self-destructive attempts or threats would be expected. This paper hopes to assist those responsible for programs for pregnant teen-agers by alerting them to the need for listening for possible hints of future irrational acts and by stressing the urgency of long-term follow-up of this population. Research personnel may wish to use rate of suicide attempts as an additional measure of the success of special programs.

Study Method

The information about self-destructive attempts or threats was found in the course of a study concerned with intervals between conceptions in a teenage population. The review of records was made at the Yale-New Haven Hospital in 1968, eight or nine years after the "index delivery" of 1959 or 1960. The group of 105 patients retained for study met the following three criteria: they were 17 years of age or younger and residents of New Haven at the time of the index delivery, and there was follow-up information available in the hospital chart for a period of at least two years thereafter. (Four exceptions were made to the latter criterion, where the records showed an additional pregnancy within a period of less than two years, although the follow-up stopped short of two years.) Such a review, limited to only one of the two area hospitals, and without a search of private physicians' records, certainly underestimates the number of suicide attempts and threats.

For the purpose of the hospital chart review, the following were classified as

self-destructive acts: any self-mutilation such as wrist-slashing, jumping from buildings, the ingestion of any substance which the patient might have thought to be harmful, and the ingestion in obviously excessive amounts of any medication. In addition, two patients whose records showed a threat or fear of suicide were included in this group, hereafter referred to as the "suicide attempt" group.

The first section of this paper will describe the 14 patients in the "suicide attempt" group and the attempts themselves. In the following section, the entire population of 105 meeting the previously described criteria for inclusion in the study will be analyzed to determine which characteristics are associated with a higher risk of suicide attempt or threat. Finally, the rate of suicide attempts in this obstetrical population will be compared with the rates reported by others.

Characteristics of the "Suicide Attempt" Group

Selected characteristics of the 14 patients who made suicide attempts or threats are shown in Table 1. They ranged in ages from 13 to 17 at the time of their first 1959/1960 delivery. Eight were black, six white, and eight were Catholic, six Protestant. At the time of registration for care, nine were single and five had been married. The latter were all 17 and white Catholics. Only one patient had experienced a pregnancy prior to the one in 1959/1960.

By the time they made the suicide attempt the patients ranged in age from 17 to 25. Eight were 17 or 18, one was 20, and five were 22 to 25. Eleven of the patients had been married by the time of the attempt, but four of these were already separated or divorced; three were still single.

In two cases the patient was pregnant with a second pregnancy at the

SUICIDE AMONG PREGNANT TEEN-AGERS

time of the suicide attempt. For the remaining cases, the median number of months which had elapsed between the last delivery and the attempt was 20, with a range of one month to 60 months. Four attempts were made in the first postpartum year and three of these were within four months of delivery. The median number of completed pregnancies at the time of the attempt was two.*

Varied methods of suicide attempts were recorded. Ingestion was the most common. Five women had swallowed excess amounts of tranquilizers, sleeping pills, aspirin, or similar substances, and one claimed to have drunk ammonia. Four were treated for lacerated hands or wrists. One patient jumped from a third story window, and another tried to cut herself with a razor and threatened to set fire to her clothing. In two cases, only a threat or fear of suicide was noted. In both there was also actual child abuse by the young mother or apprehension concerning infanticide.

Record review suggested that suicide attempts were often found in conjunction with the following:

Emotional Illness—Chronic psychiatric problems as well as acute episodes of depression or anxiety were noted in eight cases. Patients were described by terms such as ambulatory psychotic, depressed, disoriented, chronic anxiety, sociopath, and, severe psychoneurosis. Patient No. 6 had an acute self-destructive psychotic episode requiring hospitalization. Patient No. 13 had "acute anxiety one month postpartum." Three patients—Nos. 1, 8, and 14—had histories of previous suicide attempts. Patient No. 7 put her hand through a window on Christmas Day and No. 8 ingested aspirin on her 18th birthday. These latter two cases suggest the importance of situational stresses.

* In Connecticut it was illegal for physicians to prescribe contraception or counsel its use until June, 1965.⁷

Marital Discord—Patient No. 3 ingested antihistamine pills "after marital separation." Patient No. 9 was seen repeatedly for psychoneurotic manifestations related to a broken marriage before being treated for a wrist laceration. Her husband "lives across the street with other women." Patients 6, 7, and 8 also had reported quarrelling with their husbands.

Associated Physical Illness—Five of the patients were seen for gonorrhea or pelvic inflammatory disease. Occasionally suicidal attempts occurred in close temporal relationship to treatment for one of these conditions. One patient suffered from chronic suppurative lung disease.

Characteristics Associated with Risk of Suicide Attempt

Table 2 analyzes the frequency of suicide attempts in the study population by selected characteristics.

Age—The total study population ranged in age from 12 to 17 at the time of their first 1959-1960 delivery. Age at delivery did not appear to influence the risk of subsequent suicide attempt.

Race—There was no appreciable difference in the risk of suicide attempt between the white and the black mothers.

Religion—Twenty per cent of the Catholic patients were in the suicide attempt group as opposed to only 9 per cent of the Protestant patients. This excess risk of attempts among the Catholic mothers was found within each racial group, although the numbers were not large.

Marital Status—Subsequent suicide attempts were found in 22 per cent of those mothers who were single at registration but in only 7 per cent of those who were married at that time. One of the two who were separated or divorced

at the index delivery made a suicide attempt.

When marital status was controlled for religion, there was a suggestion of

independent association between each variable and suicide attempts. Being both Catholic and single was associated with approximately twice the risk found

Table 2—Frequency of suicide attempts by selected characteristics

Item	Total sample	Suicide attempts	
		No.	%
Total	105	14	13.3
Age at delivery			
15 and under	22	3	13.6
16 and 17	83	11	13.3
Race			
Black	58	8	13.8
White	47	6	12.8
Religion			
Catholic	40	8	20.0
Protestant	65	6	9.2
Race and religion			
Black			
Catholic	4	2	50.0
Protestant	54	6	11.1
White			
Catholic	36	6	16.7
Protestant	11	0	0.0
Marital status at registration			
Married	62	4	6.5
Single	41	9	22.0
Separated or divorced	2	1	50.0
Marital status and religion			
Single			
Catholic	8	3	37.5
Protestant	33	6	18.2
Married			
Catholic	30	4	13.3
Protestant	32	0	0.0
Separated or divorced:			
Catholic	2	1	50.0
Protestant	0	0	0.0
Residence at index delivery			
New Haven:			
Poverty areas	64	7	10.9
Nonpoverty areas	41	7	17.1
Residence, race and religion			
(a) New Haven, poverty area			
Black			
Catholic	4	2	50.0
Protestant	37	3	8.1
White			
Catholic	19	2	10.5
Protestant	4	0	0.0
(b) New Haven, nonpoverty area			
Black:			
Catholic	0	0	0.0
Protestant	17	3	17.6
White:			
Catholic	17	4	23.5
Protestant	7	0	0.0
Birthplace			
Connecticut	62	9	14.5
Other northern states	7	0	0.0
Southern states	34	5	14.7
Non U.S. or unknown	2	0	0.0
Source of care			
None	8	1	12.5
Clinic	79	10	12.7
Private	18	3	16.7
Outcome of delivery			
Full-term live birth	94	13	14.9
Premature live birth	9	0	0.0
Stillbirth	2	0	0.0
Parity			
No previous pregnancies	91	13	14.3
One or more previous pregnancies	14	1	7.1
Number of subsequent pregnancies (To date of last follow-up)			
None	8	2	25.0
1-2	45	7	15.6
3 or more	52	5	9.6
Complications of pregnancy			
No complications of pregnancy	29	0	0.0
Complication of pregnancy recorded	76	14	18.4
Veneral disease			
Reported	24	5	20.8
None reported	81	9	11.1

SUICIDE AMONG PREGNANT TEEN-AGERS

among those who were either Catholic or single. No suicide attempts were found among the married Protestants.

Residence—The proportion of suicide attempts among mothers whose residence at the time of the index delivery was a nonpoverty area of New Haven (17%) was higher than the proportion of suicide attempts among mothers from poverty areas (11%).* Residence does not appear to alter the relationships found previously, i.e., there was no difference in risk between racial groups within each of the two residential areas, but Catholics showed higher rates than Protestants within each.

Birthplace—There was no clear association between any particular area of birth and a higher or lower risk of subsequent suicide attempt.

Source of Care—The risk of suicide attempt was slightly higher among patients receiving prenatal care from private physicians than among those cared for in the hospital clinics, or receiving no prenatal care at all. The numbers are too small to reach definite conclusions, but the trend is consistent with the finding of higher risk in pregnant girls from nonpoverty areas.

Outcome of Index Delivery—All of the suicide attempts were among mothers who delivered full-term live babies. No attempts were recorded among those delivering stillborn or premature infants.

Parity—Of the total population of 105, 91 were nulliparous at the index pregnancy and 14 were having a second or third child. There was no evidence that women of higher parity were at greater risk for subsequent suicide attempt.

Number of Subsequent Pregnancies—There was a higher risk of suicide attempt among those women who had no more than two subsequent pregnancies

during the study follow-up period (17%) as compared to those with three or more subsequent children (10%). Only eight of the total population had no pregnancy subsequent to the index pregnancy; of these, two attempted suicide.

Complications of Pregnancy—Seventy-two per cent of the study population had complications recorded in the hospital chart with one or more of their pregnancies. These complications included such things as anemia, toxemia, infection, and hemorrhage. (Venereal disease was considered separately.) All 14 suicide attempts were among those who had complications recorded. None of the patients without complications were known to have made suicide attempts.

Venereal Disease—Almost one-quarter of the study population had a diagnosis of venereal disease recorded in the chart at some time. Those with this diagnosis had approximately twice the risk of subsequent suicide attempt (21% to 10%).

It is not possible to demonstrate statistical significance for the differences related to the above characteristics, primarily because of the small numbers involved. Chi-square tests show that only one of the above comparisons is significant at the conventional 5 per cent probability level. Consequently, the differences observed here are best regarded as suggestive leads. Further research may clarify the importance of the association of these factors with the risk of suicide attempts.

Relation to Other Studies of Attempted Suicide

Before any conclusions can be drawn about the possible relationship between suicide attempts or threats and teen-age pregnancy, it is necessary to determine whether the frequency of attempts is higher in this sample than in the gen-

* Defined as the lowest quartile nationally of the "Health Opportunity Index," developed by the Children's Bureau, based on the 1960 Census.

eral population or in other adolescent groups. Although the incidence of suicide carried out to completion is relatively well known, at least for those cases reported to the medical examiner, few attempts have been made to develop directly an incidence rate of attempted suicide. Moreover, since previous studies have shown that major differences exist between individuals who make suicide attempts and those who actually commit suicide,⁸ extreme caution must be exercised in using suicide rates in connection with studies of attempts. An alternative method of deriving comparative figures is by using studies which have developed a ratio between attempted and completed suicide.

For the year 1957, Shneidman and Farberow⁹ collected information on completed suicides from the Los Angeles coroner's office; and on attempts from the records of the Los Angeles County General Hospital and the 16 Los Angeles municipal emergency hospitals, and from a questionnaire sent to all private physicians and osteopaths in the Los Angeles area. The hospitals reported 2,019 attempts and the doctors an additional 3,887 for a total of 5,906. Since there were 768 completed suicides in the same period, the over-all ratio between attempts and completed suicides was 7.69:1.^{*}

Unfortunately, of those cases reported by doctors, data on only 633 were complete enough to analyze by demographic variables such as sex and age. Based on these incomplete data, the ratio of attempted to completed suicides for females of all ages was almost identical with the over-all rate, .81, for males it was only 1.5 to 1. For both sexes at ages 10 to 19, the ratio of attempted to completed suicides was considerably higher: about 18 to 1. The difference between the sexes in this age group is

especially striking: for males the ratio was about 5 or 6 to 1, but for females it was between 69 and 78 to 1.[†] For all ages combined, barbiturates and poisoning accounted for 52 per cent of the female suicides and 63 per cent of the attempts (for males the comparable percentages were 17% and 43%); no breakdown of method by age is given.

Working in New York City where the reporting of accidental and intentional poisoning is mandatory under the city health code, Jacobziner¹⁰ developed a ratio of attempted to completed suicides based on reports of ingestion in the adolescent population. For the years 1960-1961, he found 568 attempted and 5 completed suicides by ingestion of chemical agents in the under-20 age group, yielding a ratio of over 100 attempts to 1 completed suicide.

Comparing the information from Jacobziner about attempts in 1960-1961 with his classification by sex and method of completed suicide in 1961-1962, the ratios for males and females were each found to be over 100 to 1. On the hypothesis that ingestion represents 50 per cent of the attempts among female teen-agers (as was found in our sample), the ratio for all methods would be about 50 to 1.

The discrepancy between these two sets of ratios (based on Shneidman-Farberow and Jacobziner) can be partially explained by differences in the study populations and research designs. The Jacobziner study depended upon reporting, which is less complete in attempted than in committed suicides. Shneidman and Farberow, on the other hand, sought out the information, although their success with returns from doctors was not outstanding. The smaller

^{*} This figure is quite close to the less than 6 to 1 figure quoted by Stengel and Cook⁸ which they state is based on data from the police reports of Los Angeles and Detroit.

[†] These ratios were extrapolated from Shneidman and Farberow's tables in which entries are rounded to whole percentage points. The ratios which can be deduced from these data have the following ranges: for both sexes 18.1 to 19.1, for males 5.1 to 6.1; for females 69.1 to 78.1.

SUICIDE AMONG PREGNANT TEEN-AGERS

size of the sample in the Jacobziner study also might result in greater variability. Sampling fluctuations and the rather crude methods used to produce comparable figures also may have contributed to discrepancies. Unfortunately neither study provides the data necessary for a more accurate estimate, since Jacobziner does not deal with suicide attempts other than by chemical ingestion, and Shneidman and Farberow do not classify their population by both age and sex.

In the study reported in this paper, 105 patients were followed for a total of 7,084 patient-months, or 590.3 patient-years. Thus there are about 590 "women years" of risk at average ages of 16 to 22 years. On the basis of the 12 mothers who made actual suicide attempts, this is a yearly rate of

$$\frac{12 \times 100}{590.3} = 2.03\% \text{ or } 2.030 \text{ attempts per } 100,000 \text{ per year.}$$

In order to determine whether this rate of suicide attempts was larger than that expected among young females in an urban population, the rates based upon the Shneidman-Farberow and Jacobziner studies were applied to suicide rates from Cook County, Illinois, in 1959-1963¹¹ where the rate was 2.5 per 100,000 per year among females in the 15 to 24 age group. Applying this suicide rate to the estimated ratios of suicide attempts to suicides, one would expect between 173 and 195 suicide attempts per 100,000 per year using the ratios based upon Shneidman and Farberow's data, and 125 per 100,000 per year using the ratio based upon Jacobziner. The rate of suicide attempts in the study sample is roughly 10 times larger than the largest of these estimates.

Discussion

At least two alternative explanations can be advanced to explain the major finding of this study, that the rate of

attempted suicide among teen-age mothers is in excess of that which would be expected in the general urban adolescent population. The first explanation is that the stresses of pregnancy and child-rearing in some young girls are so enormous that they react by attempting suicide. An equally interesting possibility, however, is that the suicide attempt is not a direct result of the pregnancy, but that both the pregnancy and the suicide attempt stem from a common process. Both these events may represent disturbed behavior by adolescent girls. Girls who become pregnant in their teens may be demanding attention or trying to punish or inflict pain on their parents or other significant persons in their environment. Similarly, the suicidal act or threat may be a way of striking out or seeking revenge.

A study of suicide attempts in pregnant women by Whitlock and Edwards¹² seems to support this latter alternative. They noted that the "majority of suicidal attempts by the pregnant women were impulsive, often precipitated by violent interpersonal disputes which did not necessarily relate to the pregnancy. The women showed marked instability of personality and many had experienced life-long interpersonal and sexual difficulties. A follow-up survey of two-thirds of the patients showed that 37 per cent of the women continued to show major psychiatric disorders."

Further research would be necessary to determine whether either of the alternative explanations offered would account for the increased rate of suicide attempts or threats in this population.

Risk of Suicide Attempt

The data reported earlier in this article on the association between specific characteristics and suicide attempts suggest that a higher-risk group might be defined within a population of teen-age mothers. The factors associated with

an increased risk of suicide attempt within New Haven were: being Catholic, not having married, living in a nonpoverty area, experiencing a complication of pregnancy, and having a venereal disease at some time. The religion and marital status variables are especially notable since they run contrary to some studies of committed suicides. Since Durkheim's¹⁴ classic study, it has been assumed that committed suicides were lower among Catholics than other religious groups. Recently, this conclusion has been questioned.¹⁴ Relative to marital status, Seiden¹⁵ recently pointed out that although suicide is less frequent among married persons, this is not true in the young married population. Under the age of 24, and especially under 20, the death rates from suicide are higher among married men and women than among single men and women. Seiden suggests that "perhaps youngsters who marry in their teens are seeking to escape from unsatisfactory home environments, or perhaps early marriage, *per se*, introduces stresses which lead to suicide."

The fact that women who were single, Catholic, and not living at a poverty level were more likely to attempt or threaten suicide than other women who also had borne children in their teens would seem to suggest that the acceptability of the pregnancy in the women's social group might be a contributing factor. Certainly in almost all groups, regardless of age, it is more acceptable to be pregnant if one is married than if one is not. Catholic religious training places strong proscriptions on sexual activity outside of marriage.¹⁶ Finally, although teen-age preg-

nancies undoubtedly occur in large numbers in the middle and upper socioeconomic groups, in the public mind pregnancy at a young age is associated with illegitimacy and with the lower socioeconomic class. Therefore, when a teen-age girl who is single and/or Catholic and/or living above the poverty level finds herself pregnant, she may be more aware of the disapproval of her social group than she would be if she were a married and/or non Catholic and/or a poverty-level teen-ager. This awareness of deviance from the norms of the group may make a suicide attempt or threat more likely.

Several of the findings indicate that those who attempt suicide represent a disturbed population: the high rate of venereal disease—which is often associated with promiscuity—and the frequent histories of emotional illness including psychiatric symptomatology, of previous suicide attempts, and of marital discord. Moreover, the high rate of pregnancy complications among those who threatened or attempted suicide, and the presence of physical illness in conjunction with several of the attempts suggest that physical conditions should not be overlooked. Venereal disease may be viewed as both an emotional and a physical factor.

The Significance of the Suicide Attempt

Given what appears to be an excess number of suicide attempts among women who become pregnant in their teens, a question can be raised about the importance of this act. Is committed suicide a real possibility in this population? If it is not, is the suicidal behavior important in itself?

Several studies have shown a high rate of completed suicide among those who previously attempted or threatened suicide, i.e., suicide attempters are a high-risk group for completed suicide.^{17,18} In addition, another study undertaken

* Kinsey¹⁶ studied the association between religion and feelings of regret about premarital coitus among women. Although the differences were greater between the more or less devout within the religious groups, 35 per cent of the devout Catholics as compared to 23 per cent of the devout Protestant women regretted the experience.

SUICIDE AMONG PREGNANT TEEN-AGERS

by the authors of this paper uncovered two apparent suicides in an obstetrical clinic population which delivered from 1963 through 1965. One took place two years after delivery but while the girl was pregnant with her third child; the other, three years postpartum. Pugh's¹⁹ analysis of mental disease related to childbearing is also relevant to this question. Considering first admissions to Massachusetts mental hospitals, he found a large excess of admissions with psychosis during the first three months postpartum for childbearing women as compared to nonchildbearing women. The risk of hospitalization was highest at the extremes of age, including the 15 to 19 age group. In a personal communication, Pugh noted that 2 of the 75 women in this childbearing group later committed suicide, eight months and one and a half years postpartum respectively. These data suggest that although suicide, carried to completion during pregnancy may be uncommon,* suicide is a significant risk in the postpartum period, particularly among those with a history of suicide attempts or of mental illness.

Even if completed suicide were not a significant risk, there would be important reasons to pay attention to the suicide attempt. First, physical harm to the woman or her infant is a frequent sequel of such attempts. Second, the attempt conveys a message to the environment. Rubenstein, et al.,²⁰ have suggested that a suicide attempt should be considered "not as an effort to die but, rather, as a communication to others in an effort to improve one's life." The message should not be ignored by the helping professions, even though it was originally directed to people important in the pregnant patient's life. The young

woman who attempts or threatens suicide is consciously or unconsciously signaling to the world that she needs help. If this alarm is not heeded, there may be dire consequences for the individual and her child.

Siegal and Friedman²¹ have commented on the impact of suicide threats: "The threat of suicide forces people to marry, prevents marriage dissolution, coerces companionship between persons despite their mutual infidelity, prevents marriages, forces parents to acquiesce in their offspring's vicious habits, precludes institutionalization, is rewarded by escape from military service, is used to obtain favored treatment over siblings, is employed as a device to avoid military induction, etc." Stengel and Cook⁸ criticize the negative connotations of this list and point instead to the "frequency with which the suicidal attempt was found to have been the only effective alarm signal to mobilize long overdue medical and social help." They feel that suicide attempts consciously or unconsciously have important social effects, i.e., they modify the human environment.

Prevention of Suicide Attempts

Finally, what can be done to prevent suicide attempts or to help those who have made them? Unfortunately society has made little progress toward solving the problem of the disturbed adolescent. The education of parents and the creation of a healthy emotional climate would appear to be the first line of prevention. In addition, some program suggestions can be made. The tendency of physicians to treat a suicidal remark as a meaningless gesture should be modified. It may be only a gesture in the sense that suicide has a low probability of occurring, but it is not meaningless. It is an important sign and should be treated vigorously.

The multidisciplinary programs for

* Actually such suicides may not really be uncommon but merely underreported. Newspaper accounts of suicide pacts between unwed adolescent couples often cite pregnancy as a factor.

teen-age mothers being developed across the country, with their concentration on individualized care for medical, educational, and social problems, should help detect patients at risk for suicidal acts, as well as provide the help which may make such a dramatic "alarm signal" unnecessary. It may be necessary, however, to mobilize additional psychiatric resources in order to provide individual and/or group therapy, not only for those who have already made a threat or attempt, but also for the high-risk group. Regardless of the reason for the suicide threat or attempt, the findings clearly indicate the need for increased concern with the psychological and emotional needs of the pregnant adolescent both during her pregnancy and for several years after delivery. They also suggest that the rate of suicide attempts may be another variable to study in the evaluation of special programs for this population.

Summary

A review of the records of 105 New Haven residents who were 17 and under when they delivered an infant revealed that 14 had subsequently attempted or threatened suicide. Comparison with other studies indicates that the rate of attempted suicide in this population is higher than would be anticipated. Within the total study population, the risk of attempting suicide was somewhat higher among single girls, Catholics, and those not from poverty areas. Suicide attempts were also associated with pregnancy complications and venereal disease. It is suggested that this excess of suicide attempts may be due to the stress of the pregnancy, or that both the pregnancy and the suicide attempt or threat may be forms of disturbed adolescent behavior.

The dangers of committed suicide or physical harm, and the "signal for help"

function of the attempt, strongly suggest the need for preventive measures including early detection and intensive treatment of long duration for both the suicide-prone and those who have threatened or attempted suicide.

REFERENCES

1. Howard, M. The Webster School. U. S. Department of Health, Education, and Welfare (Children's Bureau), 1968.
2. Sarrel, P. M., and Davis, C. D. The Young Unwed Primipara. *Am. J. Obst. & Gynec.* 95:722 (July 1), 1966.
3. Keeve, J. P., et al. Fertility Experience of Juvenile Girls: A Community-Wide Ten-Year Study. *A.J.P.H.* 59:2185 (Dec.), 1969.
4. Schleisenger, R. H.; Davis, C. D.; and Milliken, S. O. Out-Patient Care—The Influence of Interrelated Needs *Ibid.* 52:1844 (Nov.), 1962.
5. Holmes, M. E.; Klerman, L. V.; and Gabrielson, J. W. A New Approach to Educational Services for Pregnant Students. *J. School Health* 40:4:168. (Apr.), 1970.
6. Sarrel, P. M., and Klerman, L. V. The Young Unwed Mother—Obstetrical Results of a Program of Comprehensive Care. *Am. J. Obst. & Gynec.* 105:575 (Oct. 15), 1969.
7. Section 53-32, General Statutes of Connecticut, Revision of 1958.
8. Stengel, E., and Cook, N. G. *Attempted Suicide: Its Social Significance and Effects*. London: Institute of Psychiatry, 1958.
9. Shneidman, E. S., and Farberow, N. L. "Statistical Comparisons Between Attempted and Committed Suicides." In: *The Cry for Help*. Farberow, N. L., and Shneidman, E. S. (eds.). New York: McGraw-Hill, 1961.
10. Jacobziner, H. Attempted Suicides in Adolescence. *J.A.M.A.* 191:101 (Jan. 4), 1965.
11. Maris, R. W. *Social Forces in Urban Suicide: Homewood, Ill.*: Dorsey Press, 1969.
12. Whitlock, F. A., and Edwards, S. E. Pregnancy and Attempted Suicide. *Comprehensive Psychiat.* 9:1 (Jan.), 1968.
13. Durkheim, E. *Suicide*. Glencoe, Ill.: Free Press, 1951 (originally published in 1897).
14. Morphew, J. A. Religion and Attempted Suicide. *Internat. J. Social Psychiat.* 14: 188 (Summer), 1968.
15. Seiden, R. H. *Suicide Among Youth: A*

SUICIDE AMONG PREGNANT TEEN-AGERS

- Supplement to the Bulletin of Suicidology.
National Clearinghouse for Mental Health
Information, National Institute of Mental
Health (Dec.), 1969.
16. Kinsey, A. C., et al. Sexual Behavior in
the Human Female. Philadelphia: W. B.
Saunders, 1953.
 17. Shneidman, E. S. and Farberow, N. L.,
Clues to Suicide. Pub. Health Rep. 71:109
(Feb.), 1956.
 18. Stengel, E. Recent Research into Suicide
and Attempted Suicide. Am. J. Psychiat.
118:725 (Feb.), 1962.
 19. Pugh, T. F., et al. Rates of Mental Dis-
ease Related to Childbearing. New Eng-
land J. Med. 268:1224 (May 30), 1963.
 20. Rubenstein, R., et al. On Attempted Sui-
cide. A.M.A. Arch. Neurol. & Psychiat. 79:
103 (Jan.), 1958.
 21. Quoted in Stengel and Cook, op. cit.

Dr. Gabrielson is Clinical Professor, Division of Maternal and Child Health,
University of California at Berkeley. Dr. Klerman is Assistant Professor of
Public Health. Dr. Currie is Assistant Professor of Biometry, and Mrs. Tyler is
Research Assistant, and Dr. Jekel is Assistant Professor of Public Health, De-
partment of Epidemiology and Public Health, Yale University School of Public
Health (60 College Street), New Haven, Conn. 06510.

The study upon which this paper is based was supported by grants H-118 and
H-231-C1 and 2, Children's Bureau, DHEW.

This is a revised version of a paper presented before a Joint Session of the
Maternal and Child Health, Health Officers, and School Health Sections of the
American Public Health Association at the Ninety-Seventh Annual Meeting in
Philadelphia, Pa., November 10, 1969.

James H. Scheuer

Preventing Teenage Pregnancies

Pregnant teenagers can no longer be ignored by American society. There are too many of them; their problems and their social and economic costs to society are too great. One out of every 10 teenagers—about 1 million—gets pregnant each year. Some 300,000 of those pregnancies end in abortion. About 20 percent of all 15- and 16-year-old girls are sexually active; 30,000 in that age group get pregnant each year.

Many teenage mothers drop out of school, fail to find jobs, go on welfare, have more children. Their babies are twice as likely to be premature or underweight, have a high incidence of mental retardation and physical ailments and tend to develop emotional problems. The vast majority are brought up in fatherless environments that exacerbate the situation.

In addition to the social cost, the financial burden on society is great. Last year half of the Aid to Families with Dependent Children (AFDC) funds, or \$4.65 billion, went to women who had their first children while still teenagers.

The Carter administration, led by Secretary of HEW Joseph Califano, has produced a program that is supposed to deal with all of those problems—the 360-million-a-year Adolescent Health Services and Pregnancy Prevention Act. It offers grants to communities to

link or establish facilities that give a wide variety of family-planning services, including sex education, prenatal and postnatal care for the mother and baby for up to two years, as well as education, job counseling, training and placement for the mother. The presumption is that most of those services already exist in various communities and this program would merely coordinate them. However, many commu-

The writer, chairman of the House Select Committee on Population, is a Democratic representative from New York.

nities do not have this wide spectrum of services, and creating them would cost money—much more than \$60 million.

It is also unclear just what the primary objective of the legislation is. Califano has testified before the Congress that "prevention is our first and most basic line of defense against unwanted adolescent pregnancies," yet the bill does not specify how much money will go to preventive services or to family-life and sex-education programs. (Companion legislation does specify a piddling \$3 million for sex education—administered not by HEW's

Office of Education, but by the Center for Disease Control in Atlanta and the National Institute of Health in Bethesda.)

Perhaps even more puzzling—as the goal of the Carter administration is to cut bureaucratic costs—is that the program will not be administered by the Office of Population Affairs at HEW, but by a separate new entity for which Califano plans to hire 40 additional professionals.

That proposal seems to be a duplication of an existing program, Title X of the Public Health Services Act, which already authorizes funds for family planning. This year Congress increased family-planning funding to over \$200 million for fiscal year 1979, with new funds of at least \$35 million slated to give more teenagers contraceptive counseling and services. The increase will make it possible to reach an additional 370,000 teenagers at an average cost of \$56 per girl, compared to \$7,000 per girl in the HEW proposal. Even sweeter to the cost-conscious public is the fact that Title X is administered by only seven professionals.

Title X is aimed at the very group Califano says he wants to help, yet the administration has neither requested those funds nor has it applied or even supported such requests in the Congress.

Why not? Some administration spokesmen mumble about opposition from the Office of Management and Budget concerning the cost; others insist that Califano's proposal is his "alternative to abortion" package in disguise; still others say the administration wants to create its own landmark legislation.

The fact is that teenage boys and girls will be sexually active whether we like it or not. And only about 7 percent of the 500,000 or so very young sexually active teenage girls use contraceptives. So, if the administration really wants to make its mark, it must initiate a creative family-life and sex-education program, and make it available to every school district in America where parents, teachers and community leaders want it.

The program should include more than teaching teenagers about their bodies in regard to sex. They should be made aware that sex is more than a physical desire, that a sense of self-worth and self-esteem is an integral part of sexual behavior.

Family-planning services should include instruction on natural family planning. Everyone would benefit, even those who eschew abstinence to their contraceptive option, because all would receive a first-class education in the reproductive system.

Teenagers need to be motivated to obtain contraceptive information and devices, and contraceptive services should be easily available to them. The federal government should fund more neighborhood-based pregnancy-detection clinics where young women can go for testing, pregnancy counseling and contraceptive information.

We all know that sensitivities are high on the issue of sex education, but both Catholics and Right-to-Life spokesmen have testified in our committee hearings that they are willing to have family-life education taught in the schools, providing the program includes family-life education and moral values, as well as natural family-planning education and counseling.

Teenagers have testified again and again that they both need and want sex education and family-planning counseling. Last January, a national poll reported that 77 percent of all Americans favored such a program.

I applaud the administration for facing up squarely to the issue of teenage pregnancy. But it must be dealt with, not by bureaucratic creations that are vague, ill-defined and possibly unworkable. The administration must lead a thoughtful campaign to educate teenagers about pregnancy prevention and the responsibilities of sexual involvement.

My name is Dorothy Fleegler. I am a member of the National Advisory Council on the Education of Disadvantaged Children and Chairman of its Mandated Studies Committee, member of the Executive Committee of the Center for Children and Youth for the State of Florida, Founder and President for the past 8 years of the Florence Muller Child Development Center, Inc., a number of agencies which provide free educational nourishment and family programs, and also a member of Friends of Children, a child advocacy group in Palm Beach County, Florida. I am from Boca Raton, Florida and a private citizen whose first priority is the disadvantaged child. I am an unpaid advocate for children no matter what their particular disadvantage may be.

PROBLEM STATEMENT

Today in Florida, as in other parts of the nation, teenage pregnancy and child bearing have reached proportions which might be called epidemic and constitute major problems. Each year:

1,000,000 plus teenagers 15 to 19 years of age become pregnant

More than 600,000 adolescents give birth each year

94 percent of teenage mothers keep their babies

The percentage rise in teenage pregnancy in Florida is above national figures.

The family and Health Program Office of the Florida Department of Health and Rehabilitative Services reports:

1 out of every 6 babies born in Florida during the last decade was born to a mother less than 19 years old: a total of 166,650 babies

And to mothers less than 14 years old, a total of 6,694 babies

In 1975, in the mothers' age ranges from 10 years to 50 years, 45 percent of all births are to women under 19 years of age

A total of 20,485 babies were born to unwed mothers

There are many aspects of this problem that impact on our societal, economic, health, and life-quality considerations.

ECONOMIC PROBLEMS

According to a report from Planned Parenthood Federation of America, written by Pattergis and Green:

"Teenage mothers face a greater risk of unemployment and are more likely to need public assistance . . . twice as many pregnant teenagers drop out of school before graduation, thereby lessening their opportunities to acquire skills to compete in the job market. Among teen mothers under age 15, 4 in 10 never completed the eighth grade."

9 out of 10 teenage mothers are keeping their children, and

87 percent of those pregnant out of wedlock will keep their children

The teenage parent does not have the needed resources to provide for raising a child because of:

interruption of her education (pregnancy is still the greatest cause of school drop outs among young women in the United States)

low status in the job market

ACCORDING TO THE PLANNED PARENTHOOD FEDERATION:

One-third of mothers who had their first child between the ages of 13 and 15 were below the federal poverty line; an incidence 2.6 times greater than among women who postponed childbearing until age 20 or later (12 percent of whom were poor)

Those who first gave birth at ages 16 and 17 were 2 times more likely to be poor; and even those who gave birth at ages 18 and 19 were 1.4 times more likely to be poor.

HEALTH PROBLEMS

Charles U. Lowe, special assistant for Child Health Offices, U.S. Department of Health, Education and Welfare, reports:

"very young women . . . are biologically too immature for effective childbearing. Prenatal care, no matter how comprehensive, appears to be unable to ensure the same prematurity rates sustained by older women.

According to the Planned Parenthood Federation:

"Babies of young teens are 2 to 3 times more likely to die in the first year. Low birth weight is twice as high among teenagers giving birth. Low birth weight is not only a major cause of infant mortality, but of a host of other childhood illnesses and birth defects which may involve lifelong mental retardation."

The young mother's health is also jeopardized:

"The maternal death risk is 60 percent higher for young teenagers. The young mother is more likely to suffer illness, injury, and complications from pregnancy and delivery. Records indicate that teens are twice as likely to die from hemorrhage and miscarriage and 1.5 times as likely to die from or suffer from toxemia and anemia.

Child abuse -- There is the ever-present danger of child abuse which is epidemic in this country. The babies of school-age parents are often reared in an atmosphere of stress.

Pregnancy among very young teenagers depletes the nutritional reserves needed for their own growth, and thus places them at higher risk for a variety of ills.

There is also a growing concern of "life quality" for the teen mother and her baby:

The Family Health Program Office of the Florida Department of Health and Rehabilitative Services reports that the child and teen mothers are adversely affected by the early responsibilities of raising a child.

According to Dr. Dockery, a Florida obstetrician who has worked with pregnant teens, the life chances for the teenage mother and her child are considerably less in terms of: 1) education; 2) employment; 3) fertility; 4) divorce; 5) suicide, and 6) child abuse.

Catholic Charities reported that:

"Almost all teen mothers of 276 giving birth in 1976 were ignorant of parenting skills, three-quarters were unwed, and almost all were experiencing financial difficulties."

POSSIBLE CAUSES

Of the 20 million young people in the United States between the ages of 15 and 19 years, more than half -- some 11 million -- are sexually active. In addition, one-fifth of the 8 million 13-14 year old boys and girls are believed to have had intercourse.

The Planned Parenthood Federation notes that teenagers from higher income and non-minority groups are now beginning sexual intercourse at earlier ages, leading to a higher risk of unwanted pregnancy for teenagers generally.

The lack of prevention is part of the cause. Of the sexually active teenagers -- married and unmarried -- in the 1971 unpublished national natality study:

- 30 percent had used condoms, foams, and gels from the drugstore;
- 25 percent had obtained a method from a private physician; and
- only 8 percent had obtained help from an organized family planning clinic; and
- 15 percent had never used contraception.

Planned Parenthood Federation reports 2 million teens are without effective birth control services such as clinics and physicians.

Contraception is not being used, reports Seaton Bradford, Director. Teenage Parent Program, Leon County.

BECAUSE:

The opinion that contraception will interfere with pleasure;

Contraception is not believed to be dependable;

Contraception assumes planning of sexual contact which is unusual;

The belief that contraception leads to sterility.

According to the research of Zelnick and Kanter published in Family Planning Perspectives, Vol. 9-2, March/April, 1977:

The majority of single teenage women who did not use birth control say that they thought they had sex too infrequently or had sex at a safe time of the month. Ironically, only 38 percent could accurately identify the "safe" time of the month.

84 percent of non-users said they did not wish to become pregnant.

THE PLANNED PARENTHOOD FEDERATION REPORTS:

The lack of sex education may contribute to the problem of teenage pregnancies;

6 out of 10 sex-education programs in public schools exclude birth control or family planning as a topic;

Only one-fifth of the states requiring health education mandate sex education in their schools.

Thus,

Lack of sex education

Increased sexual activity

Failure to use preventive measures

Contribute to the growing problem of teenage pregnancy.

And now, I am deeply concerned about a growing disaster in our country which is going to have a devastating effect on the quality of life for the citizenry of the near future.

I come from the real world. This world is a world of concerned people who are learning from experience and day to day living with young people who are now taking for granted the consequences of their active sex lives, pregnancy without marriage and parenthood before they gain the maturity or preparation for it. I represent these volunteers and staff people who know they are helping others from their crowded, tiny administration rooms; from the ancient poorly finished "up-five-flights" offices of settlement houses; from the little converted houses in the heart of affluent cities. I speak for those who count the cost of every statistical survey done in plush, air-conditioned Washington offices in terms of "how many kids could we have served with that money?" We don't plead for less spending -- we plead for more service per dollar per child. We are begging to improve our country, not to cut back. But we are crying out for the agencies and the legislators to stop the stupidity of management, to improve the delivery of service, to recognize those needs that are going to add more and more to the "hand-out" programs and do less and less for our future. We are not a nation of idiots. We are a nation of well-informed, fairly well-fed, free people. So what is it we are missing? What is the reason for the waste, the graft, the misuse, the neglect we are experiencing in social welfare programs?

It is a reluctance to face the truth; it is the eagerness to avoid unpleasantness; it is to be on the bandwagon of the latest "in" trend for political advantage.

That distaste brings me to the latest of our real problems we are facing in social welfare. That is the absolute fact that teenage pregnancy is becoming an epidemic in this country. And also it brings us to the fact that the approach so far of our government is determined to set up more bureaucracy, add extra fancy likes, hand out "planning" grants to all sorts of professional government/program workers and to ignore those of us who are in the midst of the dire results, who want only enough to set up models that are realistic and can be followed without new tons of paperwork and deficient evaluations that may be used any way a "statistical" pro wants them to be used.

I should like to testify to the absolute efficacy of two widely divergent programs of which I have been privileged to be in the midst.

In what is known as the DFN nursery in Boca Raton, there were on August 1, 1978, 22 babies aged 30 days to 1 year. We know these babies, their older siblings and their mothers very well. We watched over them very carefully. Of the 22, eleven have mothers aged 16-19. Eight are black, seven are singles, 1 is living with the father and one is married but separated. Of the two anglo-whites, both are divorced and so also is our one hispanic child. 5 of these mothers aged 16-19 have more than one child meaning that for many their first pregnancies were at a much earlier age. You can get much more horrendous and surprising figures in other places and from other sources. But these are by people. These are real. Our Center does not admit any but "normal" children. Yet each year we find rose birth defects and less knowledgeable mothers. We know that there is no concept of illegitimacy in this group. Although we keep the babies generally healthy, their mothers are naive regarding basic health and hygiene.

And although the mothers say they "love" their babies and they try hard, they are simply not emotionally mature enough to handle the responsibilities of motherhood. Now all this is happening despite the availabilities and accessibilities of birth control information. So all the programs springing up everywhere are not answering the problem. We do not have to worry about the hassle of religious differences, or the puritan vs. the modern morality. The answers are not going to come from all the great ideas being geared up and allocated (of course not without "studies" and more paperwork). The help the DFA is providing to these children and mothers costs in nothing extra.

The second program is centered in the oldest established settlement in New York. It does not pretend at all to say "this is what you do about this problem." They are not attacking the "problem." They have recognized why the problem is occurring. They understand that there is no "treatment" working. What they have been doing for the past three years is "promoting possibilities." Promoting the possibility that this is a trend that may be able to be reversed by effecting an entire attitude. They believe that you can start with a six year old group. That the group shall be made up of in their own language those who "hang back" and those who "push." That there is a Peer Group working with them as well as understanding directors and social service workers. They believe that your work must be developmental. The six year old is participating in a much different issue than the 13 year old. What has been found from years of work is that most young girls are passive about their own lives. This program gives them an opportunity to learn that their future is not pre-ordained. That they can learn to handle their own values, dreams, relationships and careers. There they are: each group with two distinct types of girls -- those who have little or no sense of reality and the others who bust our all over -- who have leadership but with nothing to really lead in. They are identifiable, measurable types of lads. All of them were completely informed about the planned program. And all of them had their families involved also. Do you know how they perceived their friends in the beginning? They were either hanging out, making out or smoking out. They weren't inundated with knowledge or dos and don'ts. There was a heavy component of vocational education of course. Career Guide programs are conducted by persons who are of their own background who have become successful in the fields the girls aspire to. They see believability in making their own dreams.

Those girls who do not shed the cycle don't really believe in their future happiness as they dream it. They have no concept as to how to reach a future of their dreams. So they accept a way out that they have as a way out of an impossible living situation, a way out of parental cruelty or strictness, a way for what to them might be better -- pregnancy and welfare. If the peer group is sustained in this program and a family involved the ripples iddy farther and farther out into the dream of poverty in their newfound attitudes. Developments are effected in a wider and wider range.

I testify that we can develop models, such as we are led in the second group toward a comprehensive plan to prevent the increasing tragedy of the first group. Instead of acquiring plans; for shall we bring various treatment plans into the school systems, let us have an opportunity providing for expansion of curriculum to prepare children for a better alternative to the unhappy and boring world they find themselves in. Let us make changes in archaic school attendance laws where they exist. Ladies and gentlemen, I testify to you that unless we look at the inside lives and hearts and aspirations of this young adolescent generation, we are going to be faced with a whole new generation of abused, neglected, deformed and unloved children. They are being brought into this world now because we are not developing simple inexpensive, noncontroversial services to our children who are crying out to be understood and lead out of this cycle which we must face as the only natural and normal outlet now available to them.

It is the only alternative for them because we support isolated and unconnected, yet excellent programs serving a handful of children. It is the only alternative because since this is largely a problem whose responsibility falls upon women alone, and men shy away from its responsibility, its outcome, and its embarrassment. It is the only alternative for them because we depend on concepts which have demonstrated inadequacy and failure. Despite the availability of information about contraception, the location of a few clinics in neighborhoods of high risk, and occasional sex education programs in the schools, the incidence of teenage pregnancy and venereal disease among members of this age group is geometrically increasing. These isolated approaches don't work. Interested adults, committed peer group members who become role models, counselors, and teachers who give these young girls something to look forward to, activities which meet the needs of the current lives and also the future responsibilities, these are the people who are successful with adolescents.

It is not possible or desirable for us to change adolescence, to fence in the turbulence which puberty springs on all of our children. We have not been successful with cross-cultural moralizing and band-aid programs. We must deal with the facts. The facts are compelling. Unchecked sexual activity, especially among teenage youngsters, leads to evidenced high rates of pregnancy and disease. Teenage pregnancy results in startling rates of birth defects and tragic injury to the mother and, even death. For those who survive the immediate result, there is long term stunted development for the mother and her child due to insufficient nutrition during the prenatal period economic disadvantage.

What is the proper government role? The Federal Government should provide, in a simple, unbureaucratic and low paperwork procedure, adequate funds to (1) provide neighborhood programs like the DAWN program for girls in high risk areas, (2) continue health care for the mother and her baby, should she have one, and (3) provide adequate day care and preschool programs for the children while the mother completes her education and/or obtains a job. The Federal Government should do everything it can to reduce the rate of unemployment among teenagers, remembering that young women are the ones who are employed last among

this group. If statistics were available on the 16-25 age group broken down according to sex, the results would be dramatic.

State governments should review scholastic compulsory attendance laws which discriminate against pregnant teenage women, while allowing the fathers of their babies to continue in school if they wish. Contraceptible Services to young women as well as information should be available before they become pregnant, and not, as it is now in Florida, only if they have achieved the age of majority, are parents or have parental consent.

Although these prescriptions seem disruptive, they are only disruptive of a fairytale world where these girls do not live. In the real world we must deal with real facts, and the fact is that I see more children born of teenage mothers in my center, and that the health of these mothers is impaired, and that we have tragic cases of birth defects among their children. As a provider of services, that is where I begin. This must be your bottom line; how do we provide cost effective, and program effective services to these needy young women?



THE SECRETARY OF HEALTH, EDUCATION, AND WELFARE
WASHINGTON, D. C. 20201

AUG 29 1978

The Honorable John Brademas
House of Representatives
Washington, D.C. 20515

Dear John:

Thank you for your letter providing me with an opportunity to respond to your questions about the Administration's proposed teenage pregnancy initiative and for giving me a chance to follow-up with you on this important issue.

I believe that the enclosed responses address all of the concerns raised. If there are additional questions, I would be pleased to respond to them.

Enactment of this legislation this session is important. It would provide a vehicle for addressing in a comprehensive fashion the need to assure prevention of teenage pregnancy and provision of comprehensive services to teenagers who, for one reason or another, become pregnant. I am convinced that the money spent on our proposed adolescent pregnancy initiative represents an important cost-effective investment in our future.

I am grateful for your assistance and cooperation. We look forward to working with you in assuring enactment of this much needed legislation.

Sincerely,

Joseph A. Califano, Jr.

Enclosure

Answers to Questions Concerning H.R. 12146,
The Adolescent Health Services, and Pregnancy
Prevention and Care Act, attached to letter
from Congressman John Brademas dated
August 2, 1978

Question 1

You have stated that you would recommend a veto of the House-passed version of the legislation to extend the Rehabilitation Act on the grounds "that the authorizations are too high, they contribute to inflation, and are not consistent with the administration's goals." Since the vocational rehabilitation program is now 58 years old and has a history of helping disabled people to live normal and productive lives, if these amendments are excessive, how do you justify an expenditure of sixty million new dollars to spend on a new untested, unproven approach relating to problems of teenage pregnancy?

Answer

The Department objects to the authorization levels proposed for the Rehabilitation Act in part because much of the increase over the President's request would occur as a result of creating new categorical programs, a new research institute, a facilities construction program that has not received funding in the past, and, in the case of independent living activities, would provide immediately for a State-funded program when only a few States have had experience with the concept. By contrast, the approach preferred by the Administration would provide funding increases to areas in which there has been experience, would provide for new activities under existing authorities, and would expand independent living on a project basis in order to get more experience with the concept. In general, we do not believe that it serves the nation or the handicapped to provide dramatic increases in funding (the House bill would increase the cost of the rehabilitation programs by nearly one-half) in ways that could lead to inefficient and ineffective use of the taxpayers' money through a too rapid and unplanned expansion of these activities. Moreover, we believe all programs must recognize the need for fiscal restraint in a time of inflation.

We justify the money authorized for the Adolescent Health Services, and Pregnancy Prevention and Care Act in two ways. First, funds provided under this program can provide services that will lead to savings in other programs. For example,

Each teenage pregnancy carried to term involves about \$1600 in prenatal, delivery, and postpartum services. There were almost 600,000 births to teenagers in 1976, and it is estimated that about half of these births were unintended.

The risk of having a baby with low birth weight is greater for a teenage mother than for a mother in her 20's. More than one-third of the 57,000 low-birth weight babies born to teenagers each year require intensive care. This care costs roughly \$600 per day for an average stay of about 13 days. For the 21,000 babies requiring this care in 1976, the total cost exceeded \$163 million.

Low-birth weight babies are more likely to suffer from any of several handicapping conditions, such as epilepsy, mental retardation, malformation, and brain damage. Providing special services to such unfortunate children is expensive: the cost of special education alone averages about \$1700 per child per year more than the cost of normal education.

Many teenage mothers and their children go on welfare. If the program helps even one mother and her child avoid welfare, the savings in AFDC, Food Stamps, and Medicaid costs approach \$3000 per year. And in 1975, there were over 250,000 teenage mothers with at least one child on AFDC.

Second, while one of the purposes of the project grant program is to identify which approaches to prevention and care work best with different adolescent sub-populations, we do not believe this program represents a "new, untested, and unproven approach." The proposal was developed after consultation with many interested groups and individuals, a number of whom run programs now and have proven that comprehensive services can prevent initial and repeat pregnancies, dramatically lower the school drop out rates of young parents, and provide support services to aid the young parents in finding employment and training.

Question 2

Page 10, lines 1-12, of H.R. 12146 suggests a broad spectrum of services that may be included in a local project. Please list all the specific services that may be included in a grantee's project, detailing the content and target group of each possible service. For example, not "family planning services" but rather "programs of sex education to be conducted in local school settings and to include both boys and girls," if that is appropriate, or "counseling to pregnant teenagers about pregnancy options, including abortion, carrying to term, and adoption."

Answer

Programs will not be required to offer all services which are eligible for funding. However, priority will be given to those programs which demonstrate the capability of bringing together a broad array of services. The following lists of services are exemplary and not intended to be inclusive of all possible services that could be provided.

Under comprehensive prevention programs, the following types of services could be included:

- (a) family planning services for adolescent females and males
 - (1) could be provided by family planning clinics, community health centers, social agencies
 - (2) service may include physical examination, counseling, referral to other agencies as required, dispensing contraceptives
- (b) education concerning sexuality and the responsibility of parenting for adolescents
 - (1) could be provided by family planning clinics, community health centers, social agencies, educational institutions
 - (2) content may include such items as sex education and information about physical development

(c) screening and treatment of venereal disease (male and female adolescents)

(1) could be provided by family planning clinics, community health centers, hospitals, social agencies

(2) services may include examination for venereal disease, treatment, counseling, referral to other agencies as required, follow-up services

(d) referrals for medical and non-medical problems of adolescent males and females

(1) could be provided by family planning clinics, community health centers, educational institutions, social service agencies

(2) services may include screening of medical problems, family counseling to insure follow-up, transportation to an appropriate medical institution or social agency, home visits to insure continuity of care

(e) counseling of females and males on sexuality and responsibility of parenting

(1) could be provided by schools, social agencies, family planning clinics, community organizations, church groups, community health centers

(2) services may include individual counseling sessions, group counseling sessions, sex education classes in schools

(f) community outreach programs to adolescents, community leaders, schools, community agencies

(1) could be provided by social agencies, schools, health centers, family planning clinics

(2) outreach services may include informational meetings for community leaders regarding prevention of pregnancy, discussion groups with adolescent clubs and socially-oriented organizations, development of public information

services by newspapers, radio and television, consultation with designated community organizations regarding their role in prevention of pregnancy.

We will also encourage and support the linkage of pregnancy prevention projects to other youth-serving programs in local communities, e.g., YMCA and YWCA programs, run-away youth programs, recreational centers, and training and employment programs.

In regard to comprehensive programs for pregnant adolescents, the following types of services may be included:

- (a) early and continuing primary and prenatal care for prospective mother and infant
 - (1) could be provided by program center; health facility; such as family planning clinic, doctor's office, hospital clinic; school; community agency
 - (2) could include early detection of pregnancy, comprehensive health care, health-related education
- (b) social services for prospective parents, child, and families
 - (1) could be provided by program center, social services agency, school, community agency
 - (2) could include dealing with the problems of financial and emotional support, continuing education, liaison with other community agencies
- (c) comprehensive health care for the infant
 - (1) could be provided by health facilities, such as doctors' offices, hospital clinics
 - (2) could include neonatal intensive care if necessary; periodic medical examination and screening, immunization, diagnosis and screening of such problems as nutritional deficiencies, visual and hearing defects, and mental retardation

(d) long-term follow up services for new parents and children

- (1) could be provided by school, program center, community agency, health facilities
- (2) could include comprehensive health care for the new mother, parenting education, counseling for parents and family members, family planning and family life education, how best to integrate other services

(e) education for the young parents

- (1) could be provided by schools, community agencies, program centers
- (2) could include access to a formal education program, parenting instruction, instruction in child care and child development

(f) child care

- (1) could be provided by the program center, a nearby day care center, cooperative efforts among the young parents
- (2) could include a variety of child care services

(g) methods of involving prospective and new fathers

- (1) could be provided by schools, health facilities, program centers, community agencies
- (2) could include parenting instruction, involvement in the preparation for childbirth and delivery, work in day care, vocational education and training, family planning and family life education

(h) transportation

- (1) could be provided by community agencies, program centers, day care centers, family planning programs

- (2) could include access to transportation resources to schools, community agencies, health centers, family planning programs

(1) special support services

- (1) could be provided by community agencies, program centers, housing authorities, other public and private agencies

- (2) could include advocacy services for child and parents, residential care for pregnant adolescent and adolescent mothers and child adoption services when required

Question 3

Please list specific services which may be considered "core" or "essential" to a local program and those which may be considered "optional".

Answer

While we do not believe that the Department should require programs to include a specific set of core services to qualify for a grant, we believe programs should offer both primary prevention services for non-pregnant adolescents and support services for pregnant adolescents. The bill lists a variety of services that should be included. We want communities to have the maximum flexibility possible in developing their approaches to the problems of adolescent pregnancy. However, we do expect most communities to link together or directly provide services such as family planning, pre-natal health care, education and counseling. The combination of services for a particular community will, to a large extent, depend on a number of factors, including the nature of existing services and the needs of local adolescents.

Question 4

Child care services would seem essential for those girls who chose to carry and keep their babies, and wish to return to school. Yet, the language of the bill suggests that child care services cannot be provided directly through the local projects (see page 10, lines 13-20). Is this the Department's position?

Answer

No, that is not the Department's position. Child care services would be a permissible service under Section 102 (b). However, due to the high cost of infant child care, our emphasis will not be on providing funds directly but on referring projects to other sources of funds that are designed specifically to support child care services, including title XX and other Federal, State, and local funds. In some exceptional cases, direct funding for child care services may be provided.

Question 5

If it is the Administration's position that child care services should or could be provided by local grantees, please describe any specifications such care would have to meet. For example:

- a) Would such care have to be institutionalized, or could vouchers be given for children to receive day care from other extended family members?
- b) Will there be guidelines relating to allowable costs per day for child care, or to the number of days per year per participant? If so, please state anticipated ranges for each.
- c) Does the Department intend that child care services shall be available only to those who qualify for day care under some other Federal program?
- d) Please list any other Federal programs through which such child care might be provided.

Answer

The Administration does propose that child care services be provided by local grantees. We see this legislation as supplementing existing day care activities and allowing communities to link day care with other services.

We have not developed a set of specifications concerning that care; we propose to consider issues of costs, vouchers, eligibility and program content in regulations. We welcome any suggestions the Committee may have. In cases where child care was provided through another agency, we want to ensure that such care meets the standards applicable to that program. We expect that child care funds may be available through title XX, WIN, Head Start (for older children), title IVB child welfare services and perhaps through optional State-determined programs under ESEA.

Question 6

Early pregnancy detection would seem to be an essential service, since the success of many later health components depends upon early detection, as does the effectiveness of any counseling about pregnancy options. Does the Department consider early detection services to be essential, optional, or prohibited?

Answer

The Department regards early pregnancy testing as essential to any program for pregnant adolescents, because it means prenatal care can begin at an early stage. Good prenatal care, especially during the first trimester, is extremely important for the subsequent health of the mother and infant. Pregnancy testing is important both for access and outreach purposes--teenagers who think they may be pregnant and seek early testing can be provided with incentives to use preventive contraceptive services if they intend to continue to be sexually active. Teenagers who learn they are pregnant can be encouraged to adopt healthful practices during the pregnancy and can be subsequently monitored carefully so that maternal and infant complications, considerably higher for adolescents, can be avoided.

Question 7

On page 10, line 3-8, there is very general language about vocational counseling and educational services. Can local projects supported under grants from this program include vocational training components only if they are available through another Federal or State program? Specifically, will local projects be allowed to pay for primary schooling, transportation, community college fees, or proprietary school tuition?

Answer

The legislation would allow the use of project grant funds to provide vocational training and other educational services but emphasis will be put on coordinating existing services and other appropriate funding sources for these purposes. While such services will be allowed, programs and local projects will have to establish priorities. Every program will have to justify its proposed use of grant monies for these and any other activities in terms of--

- o the purpose of the legislation to prevent unwanted pregnancies and to provide support for pregnant adolescents;
- o the lack of such programs, funded through other sources, which could be linked to the project;
- o the magnitude of the need for such services in relationship to other needs for prevention and support services.

Question 8

Please specify through detailed examples what is meant by "education at the community level concerning sexuality and the responsibilities of parenthood." How much would such programs cost? Where would they be delivered? To whom? By whom? Would "moral education" fall under this category of expenditures? If so, can you provide a definition of moral education, which will clearly distinguish it from both religious training and social coercion?

Answer

Education at the community level concerning sexuality and the responsibilities of parenthood encompasses a variety of types of programs. These programs could be discussion groups sponsored by schools or community-based organizations or special presentations before adolescent and adult organizations such as scout troops and PTAs.

Cost: Costs will vary depending on the type of education program developed, whether the program is free-standing or attached to an already existing program, and the extensiveness of the program both in terms of topics covered and length of program.

Where: The program could be delivered in any facility that is accessible to adolescents and is capable of providing information in a non-threatening environment. Examples of the types of facilities which might be utilized are elementary and secondary schools, youth recreation centers, run-away youth centers, YMCAs-YWCAs, and community agencies.

To Whom: While our main focus is adolescents, others, such as parents, professionals, and paraprofessionals who work with youth and families, could also participate in the programs, thus encouraging more dialogue on issues of sexuality and responsibilities of parenting.

By Whom: Any organization that qualifies for a grant under this legislation could provide community-based education programs -- such as schools, Planned Parenthood organizations, health clinics, PTAs, United Way, consortiums of social service organizations.

Moral Education: Moral education would be one type of education on sexuality that would be permissible under this legislation.

Definition of Moral Education: Moral education does not focus exclusively on the biological aspects of sexuality or the responsibilities and economic realities of parenthood. Rather, it helps adolescents to consider the implications of their actions, to show concern for their partner and other persons who might be affected by their actions, and to decide on the values that should guide their decisions. It differs from religious training and social coercion because it is not tied to a particular religious dogma and does not advocate which set of social values to follow.

Question 9

How will the Department ensure that any adolescent can choose not to participate in some project activities without jeopardizing his or her right to other services? Specifically, how will the Department ensure informed consent regarding such possible components as moral education, abortion and adoption counseling, psychological testing, and medical practices that may violate individual faiths?

Answer

The Department agrees with the principle that any service offered under this authority should be provided on a voluntary basis and with full and informed consent. We have not made decisions as to how this can best be assured, and whether our guidelines or regulations should include such directives. As you know, the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research (authorized under P.L. 93-348), has been considering these issues with respect to research; the group has also been directed to advise the Secretary on the extent to which the principles of informed consent should be extended in the health delivery system. We understand its recommendations will be forthcoming in the near future. The Department wishes to await that advice before deciding how best to ensure voluntary participation and informed consent in the program.

Question 10: (A through F)

On page 11, line 19 through page 12 line 2, and again on page 13, lines 15-17, there is some very general language regarding reporting and evaluations. How are these reports and evaluations to be conducted? Specifically:

- a) Is all evaluation to be done by the primary grantees?
- b) If so, what office within DHEW will monitor these self-evaluations?
- c) If not, which office within DHEW will conduct external evaluations?
- d) What prior experience in the evaluation of health and population programs does that office have?
- e) Would evaluations be done in-house, or primarily contracted out?
- f) On what criteria, in detail, would local programs be evaluated? Please list and justify each criterion.
- g) What is the general state of the art in evaluating programs similar to the local projects this bill proposes to establish?

Answer

While we have not completed a detailed evaluation design, it will include three components progressing simultaneously.

First, a project will report on progress against certain management objectives, for example, the numbers and types of adolescents served, the proportion of teens in the community receiving primary prevention services, trends in access to services, number of referrals to other agencies and proportion receiving services, etc.

Second, projects will report on, and be evaluated locally against, a few selected national outcome objectives, for example, number of initial or repeat pregnancies among those served, changes in health status of those served, number remaining in or returning to school, number of adolescents who keep their babies who are on welfare after one year, etc. This type of evaluation would be conducted both through reporting by local projects and local evaluations by an objective third party.

Third, the Department will conduct a national evaluation of program impact and of what sort of projects work best and why. Impact evaluation would compare like communities with and without projects as to incidence of pregnancy, health status of adolescents and their babies, school dropout rates, number on welfare, etc. This will include a longitudinal study of program participants and nonparticipants. Certain projects with certain components (perhaps randomly added) will be compared against projects in similar communities without these components.

The evaluation design will be completed and ready to implement prior to the initiation of program funding.

Project evaluation requirements which are tied into the reporting process will be identified during the implementation stage so that an appropriate tracking mechanism can be built into the ongoing management systems.

No decision has been made yet with respect to which office will be responsible for developing external evaluation plans. DHEW Staff with expertise in internal and external evaluation will assist in the planning of evaluation studies. In addition, we will recruit staff who have experience in evaluating programs serving the adolescents who are targeted in this legislation.

A literature search reveals a limited number of formal evaluation studies of pregnancy prevention and care programs during the past ten years. While many programs have wanted to conduct evaluation studies, resources and technical assistance have generally not been available to them. Consequently, the evaluation planned by HEW will provide information which will be useful at both the local and national level.

Question 11

The enclosed organization chart has been distributed by the Department, and apparently represents plans for an office to administer the program to be established by this piece of legislation. It shows a total of 40 professional staffers, and 16 support personnel.

a. Question

Is this Office, with its three Divisions, intended solely to administer the program resulting from H.R. 12146, or are there to be other programs administered there as well? If other programs are to be included, please provide a complete list of these programs to be administered through that office.

Answer

The sole function of the proposed Office will be to administer the programs resulting from passage of H.R. 12146, the "Adolescent Health, Services and Pregnancy Prevention Act of 1978" and to coordinate Department efforts in this area.

b. Question

In the event of a job freeze, how does the Department intend to staff this office and its divisions?

Answer

The way in which the office would be staffed depends on the nature of such a "freeze." However, this initiative is of the highest priority in the Department. You may be assured that we will do whatever is necessary, within the restrictions of any "freeze," to staff the Office adequately.

c. Question

- d. The ratio of proposed funding (\$60 million) to proposed professional staffing (40 individuals) is \$1.5 million/1 professional.

Please provide ratios of available funds per personnel for other major health, education and social services programs administered by the Department. (Such a list should include at a minimum, AFDC, Medicare/Medicaid,

ESEA Title I, and may also include other smaller service programs. Programs which are primarily research oriented should not be included.)

Answer

Any comparison of these ratios is grossly misleading because program staff responsibilities vary greatly, e.g., some monitor projects directly, while others work through state agencies. In addition, the nature of the funds is quite different, e.g., some are discretionary funds, and others are block grants. Nonetheless, in order to be responsive to the question, we have provided the following ratios of amount of funds per professional staff in some health, education, and social services programs:

Staff/Available Funds for FY 1978

<u>Program</u>	<u>Federal Staff</u>	<u>\$ Million</u> <u>Authorized</u>	<u>Ratio</u> <u>\$/staff person</u>
AFDC	901	\$5,798	\$6.4 million
Medicare	685	\$25,611	\$37.4 million
Medicaid	1,765	10,851	\$6.1 million
ESEA	86	2,735	\$31.8 million
Follow Through	26	59	\$2.3 million
Indian Education	50	58	\$1.2 million
Developmental Disability	18	59	\$3.3 million
Child Abuse	29	19	\$.7 million
Child Welfare Services	33	56	\$1.7 million
Family Planning	114	135	\$1.1 million

Question 12

Essential, detailed cost estimates for program components and for individual projects thus far has not been available to any of the Congressional committees. Five broad categories of services and/or project expenses are described below (four categories of potential client, and one category of expenses not directly related to individual client services.) Please provide a specific estimate or range of costs for each item shown in the tables, along with any other information specified for that item. In addition, please indicate whenever possible what data source is used to establish individual estimates

Answer

As you requested, we have provided the following estimates of costs associated with adolescent pregnancy prevention and care. However, these estimates in no way reflect costs that would be provided through project grant funds. Rather than pay for services, one of the major functions of the teenage pregnancy program will be to refer individual projects to appropriate funding sources and to help coordinate the variety of existing services that should be part of a comprehensive teenage pregnancy project.

For example, adolescents cannot legally be excluded from attending public school because of pregnancy or because they are parents. Therefore, we would expect projects to work closely with the public schools in order to develop educational options appropriate for school age parents (and parents-to-be). Also, many adolescents are eligible for medical assistance from a variety of sources such as titles XIX and XX of the Social Security Act or title V of the PHS Act, and therefore, projects would not have to pay direct medical costs.

To the maximum extent feasible we would expect our projects to link into existing service delivery systems and not create either new "systems" or pay for services which could be provided through other funding sources.

- (1) For those who are not pregnant, the cost of the services described average \$50 - 110 per year. This includes four to five visits during one year for each adolescent served, and transportation when appropriate. (Statistics from title X program)

(2) For those who are pregnant and choose an abortionHealth

Pregnancy testing	\$5.00
Family Planning, counseling, abortion referral, transportation if required, counseling	\$80 - \$110/year. 4 - 5 visits per adolescent/year

Social Services

Cost of social service referrals included in the \$80 - \$110 family planning figure.

Education

According to National Center for Educational Statistics, the cost per Pupil with average daily attendance is between \$1500 and 1600/year per pupil (1975-76 - \$1699; current \$1500.) There is no breakdown for individual subject areas as English, Math, Family Life, Sex Education, etc. This figure is an average for school systems across the country.

(3) For those who are pregnant and carry their babies to term and place for adoptionHealth*

1. General Health	\$355 including dental and optometry
2. Pregnancy testing	\$5
3. Prenatal care	\$500
4. Nutrition info	Usually included as part of prenatal care
5. Meals	\$67/year average**

* Health cost figures based on estimates from Medicaid

** Average cost is for each person/year for a school lunch and snack, based on study of costs for five comprehensive service programs

6. Labor and Delivery	\$900
7. Postnatal Care	\$100
8. Pediatric	\$355
9. Family Planning	\$80 - 110 4 to 5 visits/year

Social Services

Individual and group counseling to pregnant girls, family counseling, follow-up services for adolescent mothers, counseling to fathers, psychological testing. \$454.00 per adolescent per year*

Group home, residential care \$1000-1500 per month
average stay is from
2 - 5 months

Legal Services Often provided without cost by community legal aid programs and not paid for by programs

Day Care \$1500 to 3500 per year (probably not appropriate since infants are generally placed within a few days-weeks.)

Transportation \$101/year (average of 5 programs)

Education

1 and 3

Regular Academic Curriculum, Vocational Training \$1500 to \$1600/year
(See previous reference)

* (Based on study of costs of five comprehensive service programs)

2

Special Educational services (Instruction for teenage parents such as child development and care, parenting, sex education, etc., educational and vocational counseling; not including regular public school education.)

Based on Study of Costs of 5 comprehensive service programs

\$122 average cost per adolescent

Girls who are pregnant and keep child

Health

- | | |
|-----------------------|---|
| 1. Health | \$355 (including dental and optometry) |
| 2. Pregnancy Testing | \$5 |
| 3. Prenatal | \$500 |
| 4. Nutrition info | Usually included as part of prenatal care |
| 5. Meals | \$67 average (see previous reference) |
| 6. Labor and Delivery | \$900 |
| 7. Postnatal | \$100 |
| 8. Pediatric | \$355 |
| 9. Family Planning | \$80 - 110 |

Social Services

Individual and group counseling to pregnant girls, family counseling, follow-up services for adolescent mothers, counseling to fathers, psychological testing.

\$454 per adolescent per year (See previous reference)

Education1 and 3

Regular Academic Curriculum,
Vocational Training

\$1500 - 1600/year
(See previous
reference)

2

Special Educational services
(Instruction for teenage
parents such as child develop-
ment and care, parenting, sex
education, etc., educational
and vocational counseling; not
including regular public school
education.)

\$122 average cost per
adolescent

Based on Study of costs of 5 comprehensive service
programs.

(5) Project expenses not associated with individual
adolescent participants

Physical facilities, administrative costs, pregnancy
prevention outreach to community, staff training,
program evaluation.

Based on a Study of costs of 5
comprehensive service programs.

Average cost
\$442.00 per
adolescent